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REVISION OF THE PALAEARCTIC SPECIES OF MELIERIA R.–D. (DIPTERA, ULIDIIDAE, OTITINAE)
1. THE GROUPS OF SPECIES ASSIGNED TO HYPOCHRA LOEW

Ревізія палеарктичних видів роду Melieria R.-D. (Diptera, Ulidiidae, Otitinae). 1. Групи видів, що вміщувалися до Hypochra Loew. Каменева О. П. — Показано, що рід *Hypochra* Loew є парафілетичним утворенням. Види, що відповідають його діагнозу, мають спільні плезіоморфні ознаки і утворюють монофілетичний кластер разом з видами, які традиційно вміщуються в роди *Melieria* R.–D. і *Phaeosoma* Becker. Переглянуто діагноз і об'єм роду *Melieria*, що в результаті вміщує 30 палеарктичних і 6 неарктичних видів, розподілених поміж чотирма підродами: *Melieria* (s. str.), *M.* (*Phaeosoma*), *M.* (*Paramelieria*), subgen. n. і *M.* (*Hypochra*), stat. n. Подано описи одинадцяти палеарктичних видів, ознаки яких відповідають діагнозу *Hypochra* sensu Hennig (1939): *M.* (*H.*) *albipennis* (Lw.), comb. n., *M.* (*H.*) *albufera* (Lyneborg), comb. n., *M.* (*H.*) *asiatica* (Hennig), comb. n., M. (subgenus?) *clara*, sp. n., *M.* (*P.*) *dolini*, sp. n., *M.* (*P.*) *felis*, sp. n., *M.* (*H.*) *oxiana*, sp. n., *M.* (subgenus?) *parmensis* Rd., *M.* (subgenus?) *pseudosystata*, sp. n., *M.* (*H.*) *subapennina* Rd., і *M.* (*H.*) *turcomanica*, sp. n. Наведено таблицю для визначення видів *Melieria* (за виключенням підродів *Melieria* s. str. та *Phaeosoma*).

Ключові слова: Diptera, Ulidiidae, Otitinae, Палеарктика, фауна.

Ревизия палеарктических видов рода Melieria R.–D. (Diptera, Ulidiidae, Otitinae). 1. Группы видов, относившиеся к Hypochra Loew. Каменева Е. П. — Показано, что род *Hypochra* Loew является парафилетическим образованием. Виды, соответствующие его диагнозу, имеют общие плезиоморфные признаки и образуют монофилетический кластер вместе з видами, традиционно относимыми к *Melieria* R.–D. и *Phaeosoma* Becker. Пересмотрен диагноз и объем рода *Melieria*, который в результате включает 30 палеарктических и 6 неарктических видов, распределенных между четырьмя подродами: *Melieria* (s. str.), *M.* (*Phaeosoma*), *M.* (*Paramelieria*), subgen. n. и *M.* (*Hypochra*), stat. n. Приводятся описания одиннадцати палеарктических видов, признаки которых соответствуют диагнозу *Hypochra* sensu Hennig (1939): *M.* (*H.*) *albipennis* (Lw.), comb. n., *M.* (*H.*) *albufera* (Lyneborg), comb. n., *M.* (*H.*) *asiatica* (Hennig), comb. n., *M.* (subgenus?) *clara*, sp. n., *M.* (*P.*) *dolini*, sp. n., *M.* (*P.*) *felis*, sp. n., *M.* (*H.*) *oxiana*, sp. n., *M.* (subgenus?) *parmensis* Rd., *M.* (subgenus?) *pseudosystata*, sp. n., *M.* (*H.*) *subapennina* Rd., и *M.* (*H.*) *turcomanica*, sp. n. Дана таблица для определения видов *Melieria* (кроме подродов *Melieria* s. str. и *Phaeosoma*).

Ключевые слова: Diptera, Ulidiidae, Otitinae, Палеарктика, фауна.

The genus *Melieria* R.–D. is widespread in Holarctic. By far, *Hypochra* Loew and *Phaeosoma* Becker, the two closely related genera were usually considered as separate genera, differing in few characters of external morphology (*e. g.*, Soós, 1984). *Hypochra* was a genus poorly examined and performed in collections. During the revision of the latter genus involving rather voluminous materials from the territory of the former Soviet Union the author have recognised several new species formally fitting diagnosis of *Hypochra*. These species were found to have somewhat intermediate position between *Hypochra* and *Melieria*. In subsequent computer phylogenetic analysis it was found, that the genera *Melieria*, *Hypochra* and *Phaeosoma* could not be separated successfully, and the concept of *Melieria* was changed to include species of the other two genera. The present communication concerns the species, formally being keyed as *Hypochra* s. str. with the keys compiled by Hennig (1939) and hereby transferred to *Melieria*.

Loew (1868) established the genus *Hypochra* for the single species *Ortalis albipennis* Loew, from Greece. Mik (1885) added to the genus three more species: *Melieria parmensis* Rondani, *M. subapennina* Rondani, and *Hypochra atricornis* Mik from northern Italy and Austria. Hennig (1939) described *Hypochra asiatica* Hennig and transferred into *Hypochra* the two species, *Phaeosoma nigricorne* Becker and *Meckelia griseicollis* Becker from western China. Lyneborg (1969) described *Hypochra albufera* Lyneborg from Spain. Later, Soós (1971) re-assigned three of these species to *Phaeosoma* Becker, the genus he resurrected to include 4 Palaearctic species.

Table 1. Matrix of character state distribution in *Melieria* and allied genera of Ulidiidae

Таблица 1. Матрица распределения состояний признаков у *Melieria* и в близких родах Ulidiidae

No	Taxa	Character number:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Dummy	outgroup	0	0	0	0	0	0	?	0	0	0	0	0	?	1	1	0	0	?
2.	*Ceroxys*	*urticae*	0	0	1	0	0	0	1	0	0	0	1	0	-	1	1	0	0	0
3.	*Ceroxys*	*laticornis*	0	0	1	0	0	0	1	0	0	0	1	0	-	1	2	0	0	?
4.	*Melieria*	*atricorne*	0	0	1	1	1	1	2	0	0	0	0	0	1	0	-	0	0	0
5.	*Melieria*	*griseicolle*	0	0	1	1	1	1	2	0	0	0	0	0	?	1	0	0	0	0
6.	*Melieria*	*crassipennis*	0	1	1	0	0	3	4	0	0	0	0	0	0	1	1	0	1	0
7.	*Melieria*	*picta*	0	1	1	0	0	3	4	0	0	0	0	1	0	1	1	0	1	?
8.	*Melieria*	*cana*	0	1	1	1	0	3	4	0	0	0	0	1	1	1	1	0	1	0
9.	*Melieria*	*obscuripes*	0	2	1	0	0	3	4	0	0	0	0	1	1	1	1	0	1	?
10.	*Melieria*	*acuticornis*	0	1	2	0	0	3	4	0	0	1	0	0	1	1	1	0	1	0
11.	*Melieria*	*beckeri*	0	2	1	1	0	3	4	2	0	0	0	0	1	1	1	0	0	?
12.	*Melieria*	*mongolica*	0	1	1	1	0	3	4	2	0	0	0	1	1	1	1	0	1	?
13.	*Melieria*	*clara*	0	1	1	1	0	1	2	1	0	2	0	0	1	1	1	0	0	0
14.	*Melieria*	*pseudosystata*	0	1	2	0	0	1	1	0	2	0	0	0	1	1	0	0	0	0
15.	*Melieria*	*parmensis*	0	1	1	0	0	2	2	1	2	0	0	1	0	1	1	0	0	0
16.	*Melieria*	*dolini*	0	2	2	1	0	1	3	0	0	0	0	1	0	1	1	0	1	0
17.	*Melieria*	*felis*	0	2	2	0	0	1	3	0	0	0	0	0	1	1	1	0	1	0
18.	*Melieria*	*asiatica*	0	1	2	0	0	1	2	0	0	1	0	0	1	1	2	2	0	0
19.	*Melieria*	*subapennina*	0	1	2	0	0	1	3	0	0	2	0	0	1	1	2	2	0	0
20.	*Melieria*	*albufera*	0	1	2	0	0	1	1	2	1	1	0	0	1	1	2	1	0	0
21.	*Melieria*	*turcomanica*	0	1	2	0	0	1	1	2	2	1	0	0	1	1	2	1	0	0
22.	*Melieria*	*albipennis*	0	1	2	0	0	1	2	0	1	2	0	0	1	1	2	2	0	1
23.	*Melieria*	*oxiana*	0	1	2	0	0	1	2	0	1	2	0	0	1	1	2	2	0	1

0 — plesiomorphic, 1, 2, 3 — apomorphic, if not stated otherwise (see explanations in the text). Weights of each character obtained from each successive weighting procedure are given in the Table 2.

Finally, the genus *Hypochra* was redefined (Soós, 1971; 1984) to include 5 Palaearctic species, *H. albipennis* (Lw.), *H. albufera* Lyneborg, *H. asiatica* Hennig, *H. subapennina* (Rd.), and *H. parmensis* (Rd.).

Until recently no species of *Hypochra* were recorded from the large territory of the former Soviet Union (Richter, 1970), and the sole specimen of *Hypochra asiatica* from Middle Asia has become the first record (Kameneva, 1992). During further examination of undetermined material deposited at the Schmalhausen Institute of Zoology (Kiev) and the Zoological Institute (St. Petersburg), numerous specimens apparently belonging to *Hypochra* species were surprisingly discovered. Six of the ten species from Azerbaidjan and Middle Asia were found to be new. Although they fit the diagnosis of *Hypochra* well, they are suspected to comprise a non-monophyletic group, because of their diverse morphological appearance. The present study provides a cladistic analysis of the species assigned to *Hypochra* and the related genera, *Phaeosoma, Melieria* and *Ceroxys*. It shows, that the species of *Hypochra* (in the most recent concept), in fact, form two monophyletic groups plus three separate species, belonging to a larger cluster that includes also a monophyletic lineage that corresponds to *Melieria* s. str.

Taking into consideration that the species assigned to *Hypochra* differ mostly in genitalic and less conspicuous non-genitalic characters, I decided not to erect separate genera for each of the monophyletic clusters. As a result, the two subgenera, *Hypochra* Loew and *Paramelieria* subgen. n. Were included in the genus *Melieria* s. l. The three species not belonging to any of the established subgenera, were retained without a subgeneric placement.

A key to Palaearctic *Melieria*, other than the subgenera *Melieria* s. str. and *Phaeosoma* Becker, is given, and full redescriptions with figures are provided. Soós (1971) gave a key to Palaearctic *Melieria* s. str., and Steyskal (1962) reviewed Nearctic species.

The use of the senior family name Ulidiidae, instead of Otitidae, was discussed by Kameneva and Korneyev (1994).

Table 2. Weights assigned to characters by successive approximations weighting procedure

Таблица 2. Веса, получаемые признаками в ходе процедуры последующих взвешиваний

No	Characters	Analysis 1 1st **mh bb***	Analysis 2 2nd **mh bb***	Analysis 2 3rd **mh bb* nelsen**	Analysis 2 4th **mh bb* nelsen**
1.	Arista	3	3	3	5
2.	First flagellomere: shape	5	5	3	2
3.	First flagellomere: colour	2	1	2	0
4.	Gena	10	10	10	10
5.	Presutural dorsocentral setae	7	7	7	10
6.	Postsutural dorsocentral row	5	4	3	2
7.	Prescutellar acrostichal bristle	2	2	0	0
8.	Anterior supraalar bristle	3	0	0	0
9.	Wing pattern: apical crossband	4	2	2	2
10.	R_{4+5} and M veins	10	10	10	10
11.	Colour of tibia	1	1	0	0
12.	Abdominal terga at hind margin	1	1	0	0
13.	Prensisetae: presence	10	10	10	10
14.	Number of prensisetae	3	3	3	3
15.	Number of prensisetae	10	10	10	10
16.	Position of prensisetae	4	4	2	2
17.	Length of spermathecae	10	10	10	10
	Consistency Index	**48**	**62**	**59**	**73**
	Retention Index	**73**	**83**	**80**	**89**

Material and methods. Specimens were examined from the following collections (or located in the following collections): Deutsche Entomologisches Institut, Eberswalde-Finow (DEI), Museum National d'Histoire Naturelle, Paris (MNHP), Museo Zoologico de "La Specola", Firenze (MZF), Naturhistorisches Museum, Vienna (NHMV), Természettudományi Múzeum, Budapest (TMB), Zoologisches Museum, Humboldt-Universität, Berlin (ZMHB), Zoologisk Muzeum, University of Copenhagen (ZMUC). The following abbreviations are used for the institutions where the types of species described below, are deposited: IZK — Institute of Zoology, National Academy of Sciences of Ukraine, Kiev, ZISP — Zoological Institute, Russian Academy of Sciences, St. Petersburg, ZMUM — Zoological Museum of the University, Moscow.

The morphological terminology used in this paper follows McAlpine (1981). The abbreviation wL means wing length. English transliteration of geographical names in countries that use cyrillic alphabets, follows recommendations by Kerzhner and Nartshuk (1992), except that the transliterations are done directly from original national names, rather than from Russian.

To obtain cladograms of *Melieria* and allied taxa of Ulidiidae, character state matrices were analysed using the HENNIG86 computer program (Farris, 1988). Sixteen characters were used in the phylogenetic analysis (see below). Trees were calculated from the character data matrix (Table 1) using the **mhennig** and the **bb*** (branch swapping) option to build multiple parsimonious trees, and the technique of successive approximations character weighting (Farris, 1969; Carpenter, 1988) was applied. Then, with the option **nelsen**, a Nelson consensus tree was obtained from multiple **mhennig bb*** trees.

Character analysis. The following 16 characters are used in this study. The number assigned to each character serves to identify it in the data matrix (Table 1), and on the cladograms, and the number of character state indicates how it is coded on the cladograms and in the character matrix. All the multistate characters (1, 2, 5, 6, 7, 8, 9, 14) are coded as additive. State 0 is considered as plesiomorphic, if not indicated otherwise.

1. Arista: 0 – bare or very short pubescent, with the rays not longer, than the width of basal aristomere / 1 – moderately long pubescent / 2 – very long pubescent (longest rays ca. half as long as 1st flagellomere breadth).

Pubescence of arista rarely occurs in Ulidiidae and is inconspicuous in most genera of Otitinae (including *Ceroxys* and *Phaeosoma*) Therefore it is considered to be a synapomorphy of *Melieria* s. str. plus species assigned to *Hypochra*.

2. First flagellomere: 0 – rounded at its apex / 1 – pointed at apex / 2 – elongate and strongly acute.

Pointed or acute 1st flagellomere occurs in all *Ceroxys*, *Phaeosoma* and *Melieria* s. l., and is considered to be the synapomorphy of these taxa. The character rarely occurs in Otitinae.

3. First flagellomere: 1 – black / 0 – yellow to brownish–red.

Many Otitinae have predominantly yellow joints of antenna, whereas species of *Phaeosoma* and some *Melieria* have the flagellomere I black; distribution of this character looks rather random, adding not much to phylogenetic conclusions based on other data. Its polarity depends on the outgroup chosen for analysis.

4. Gena: 0 – lower than 1/3 of eye height / 1 – conspicuously higher than 1/3 of eye height.

Gena is higher in *Phaeosoma* than in most *Melieria* species ; the polarity depends on the outgroup chosen.

5. Presutural dorsocentral setae: 0 – not arranged in a distinct row / 1 – are arranged in a distinct row / 2 – presutural dorsocentral bristle small, seta–like, but longer than surrounding setae / 3 – presutural dorsocentral bristle well–developed.

Well–developed presutural dorsocentral bristles occur only in *Melieria* s. str. and some species usually assigned to *Otites* Latr., *Dorycera* Mg. and *Dycrasis* Aldrich, the four taxa which apparently not related to each other. Despite of this of convergence, the apomorphic state-3 is considered to be the most important synapomorphy of *Melieria* s. str. The apomorphic state-2 occurs in *M. parmensis*, and the presence of a row of dorsocentral setae is the synapomorphy of *Phaeosoma* and *Melieria* s. l., contrary to *Ceroxys*, and many other genera of Ulidiidae that have no distinct presutural dorsocentral row.

6. Postsutural dorsocentral row: 0 – one pair of bristles / 1 – two pairs of bristles / 2 – two pairs of bristles plus several long setae shorter than half of the bristles; 3 – anterior dorsocentral seta as long as half of the bristles / 4 – four or more (rarely three) bristles of equal length.

This is a character of uncertain polarity in the Ulidiidae in general, so for the dummy outgroup it is marked with "?". Some species that are not included in this study have one dc, but none of them was included into the current analysis. In most genera, including *Ceroxys*, there are 2 postsutural dorsocentral bristles in a posterior position, and I consider this state-1 as a plesiomorphic condition for *Melieria* s. l. and *Phaeosoma*. Species of *Phaeosoma*, *Melieria* s. l. (except for *M. albufera*, *M. turcomanica* and *M. pseudosystata*) have at least two additional seta–like bristles, distinctly longer than surrounding setae, that is hypothesised to be a synapomorphy of the two genera (then the three above mentioned species lack these setae secondarily, as the reversal character condition). *M. subapennina*, *M. dolini* and *M. felis* share in having one additional (third) bristle just slightly shorter than the posterior two, here considered as the apomorphic state-3. The presence of the four (or more) pairs of postsutural dorsocentral bristles is obviously the synapomorphy of *Melieria* s. str. species.

7. Prescutellar acrostichal bristle: 0 – subequal to posterior dorsocentral / 1 – shorter than half of posterior dorsocentral and fine / 2 – lacking.

This bristle is present in the ground plan of the subfamily (Kameneva, unpublished data); its reduction occurs in several lineages both of Ulidiidae in general and of *Melieria* s. l. particularly.

8. Anterior supraalar bristle: 0 – well–developed, at least half as long as the posterior one / 1 – much less than half as long as the posterior one / 2 – lacking.

The presence of the two supraalar bristles is an uncommon character among Tephritoidea (Korneyev, pers. comm.), but apparently belongs to the ground plan of the tribe Otitini (Kameneva, unpublished data). Reduction of the anterior bristle occurring in several non-related lineages of Otitinae (*Myennis* R.–D., *Systata* Lw. and *Melieria*) is apparently independent. This general homoplastic tendency makes the weight of this character low, though it may support relationships among some of the species of the subgenus *Hypochra*.

9. Wing pattern: apical crossband: 0 – well–developed / 1 – inconspicuous, shadow–like / 2 – lacking.

Polarity of this character is rather uncertain for the Ulidiidae in general, but both *Ceroxys* and *Phaeosoma* have well-developed apical crossband in the groundplan. Thus, its reduction is coded as two subsequent (additive) advanced states.

10. Veins R_{4+5} and M: 0 – subparallel at apices / 1 – convergent apically.

An autapomorphy of *Ceroxys*.

11. Colour of tibia: 0 – yellow / 1 – black.

A character of unknown polarity; both states occur in *Melieria* s. str., *Paramelieria* and beyond the genus. May indicate some particular pairs of sister-species.

12. Abdominal terga at hind margin: 0 – with brown tomentose band / 1 – uniformly greyish tomentose, without brown band.

Polarity unknown. Might be used to indicate some pairs of sister-species.

13. Prensisetae: 0 – absent / 1 – developed.

State 0 is the synapomorphy of *Phaeosoma atricorne* group.

14. Number of prensisetae on each surstylus: 0 – one / 1 – two / 2 – more than two.

This character has unknown polarity, that depends on the chosen outgroup. In the case of *Melieria* state 1, occurring in the ground plan of Tephritoidea, and also in most *Ceroxys*, is considered as plesiomorphic state, while the reduction of one prensiseta (*M. pseudosystata*) and appearance of additional prensisetae (in M. albipennis and allied species are non-additive apomorphic states.

15. Number of prensisetae on each surstylus: 0 – less than three / 1 – three to five.

4–5 prensisetae forming a row, are considered to be a synapomorphy of *M. albipennis*, *M. albufera*, *M. asiatica*, *M. oxiana*, *M. subapennina* and *M. turcomanica*.

16. Position of prensisetae: 0 – basally or at the middle of surstyli / 1 – subapical.

There are rather basal or medially positioned prensisetae in the outgroups. Apparently, the state 1 is the synapomorphy of some *Melieria* s. str. species and *M.* (*Paramelieria*) species.

17. Length of spermathecae: 0 – 4 times as long as wide, or longer / 1 – 3.5 times as long as wide, or shorter.

Most *Ceroxys, Melieria and Phaeosoma* have elongate spermathecae, but *M. albipennis* and *M. oxiana* share an unusually short spermathecae.

Results. The character data matrix was subjected to the procedures detailed below.

Assigning equal weight to all characters results in one **mhennig** cladogram with a consistency index 47 and a retention index 73 (Fig. 1). Both the branch-swapping (**bb*** option) and implicit enumeration (**ie** option) each have allowed to find 84 more equally parsimonious trees with a consistency index 48 and a retention index 72 (four of them are given on Fig. 1). Subsequent application of the successive weighting plus the second analysis (**mh bb***) results in 8 trees with a consistency index 62, and a retention index 83 in the Analysis 2 (Fig. 2 A, B), and in 16 trees with a consistency index 68, and a retention index 86 in the Analysis 3; the Nelson consensus (**nelsen**) tree (Fig. 2 C) has become the base for following application of successive approximations character weighting. The Analysis 4 results in 14 **mhennig bb** trees with a consistency index 77 and a retention index 90, and the **nelsen** tree with a consistency index 73 and a retention index 89 (Fig. 2 D, 3) was obtained from them.

Relationships. The genus *Melieria* R.–D. belongs to the subgroup of genera also including *Ceroxys* Mcq. and *Phaeosoma* Becker (subfamily Otitinae: tribe Otitini). Like them, species assigned to *Hypochra* can be distinguished from other picture-winged flies by the 1st flagellomere being pointed or, at least, concave above, vein r_1 setulose on its apical portion, cell cup with very short postero-ventral extension, body densely grey tomentose, without brown spots, phallus long spinulose and 1–4 prensisetae on surstyli (the mediobasal "brush" of prensisetae, like that in *Otites*, is lacking).

1. The species of *Melieria* (s. str.) share the presutural dorsocentral bristle well-developed, and also subapical position of prensisetae. Both characters do not occur in closely related taxa, and are considered to be the synapomorphies of the species included here.

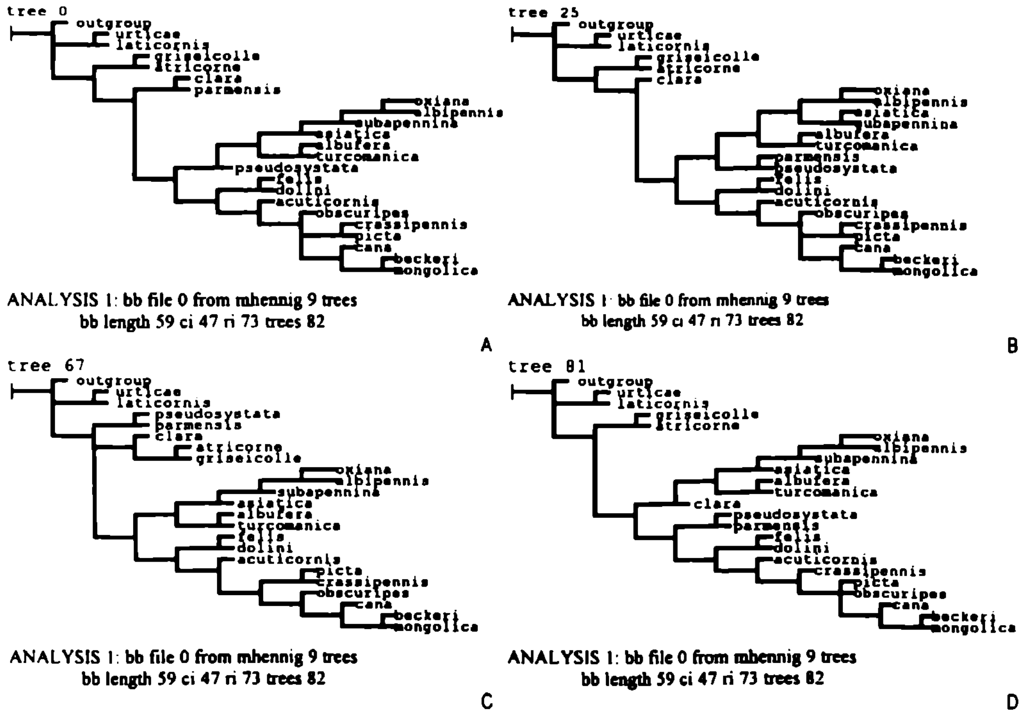


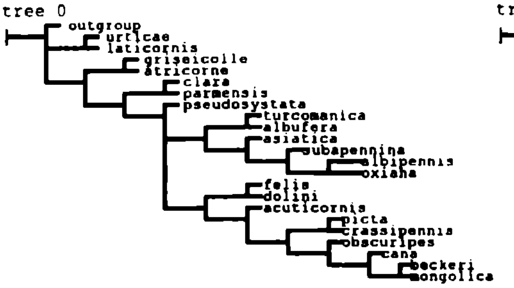
Fig. 1. Alternative cladograms obtained from the four subsequent HENNIG86 analysis with use of the successive weighting technique. Analysis 1: the four of the 82 most parsimonious trees from the mh bb* application.

Рис. 1. Альтернативные кладограммы, полученные в четырех последовательных анализах с использованием программы HENNIG86 и метода успешного взвешивания. Анализ 1: 4 из 82 наиболее парсимоничных деревьев, полученных с использованием опции mh bb*.

ii. *M. albipennis, M. albufera, M. asiatica, M. oxiana, M. subapennina*, and *M. turcomanica* all share reduced wing pattern without or with just a faint trace of the apical crossband, and rather numerous (3–5) prensisetae. Both characters are considered here as synapomorphies supporting monophyly for this group, corresponded to the subgenus *Hypochra*, stat. n.

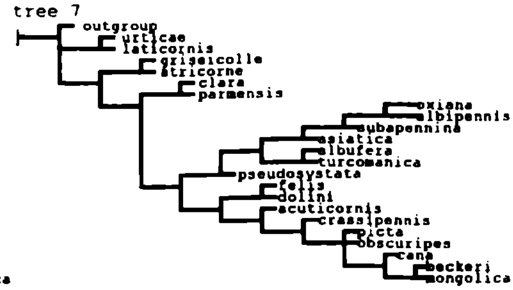
iii. Within the subgenus *Hypochra*, the three pairs of species, *M.* (*H.*) *albipennis* and *M.* (*H.*) *oxiana, M.* (*H.*) *asiatica* and *M.* (*H.*) *subapennina, M.* (*H.*) *albufera* and *M.* (*H.*) *turcomanica*, respectively, possess several synapomorphies of minor weight, that allows to arranged them as sister-species pairs (Fig. 1 B) or in different ways (Fig. 1 A, 2 A–D, 3). The monophyly of the first pair of species has a good base, whereas *M.* (*H.*) *albufera* and *M.* (*H.*) *turcomanica* are associated only highly homoplastic characters (the lack of **a sa** and **prsc ac**).

iv. Monophyly of *Paramelieria*, subgen. n. is supported by having 5th and 6th spiracular stigmae situated on the dorsal surface of abdomen, between terga, and by the combination of a long pubescent arista, elongate and strongly acute flagellomere 1, well–developed 3rd postsutural dorsocentral bristle, and two subapical prensisetae. Each of the characters occurs elsewhere in *Melieria* s. str. and *Hypochra*, but they are present simultaneously only in *M. dolini* and *M. felis*, which constitute *Paramelieria*.



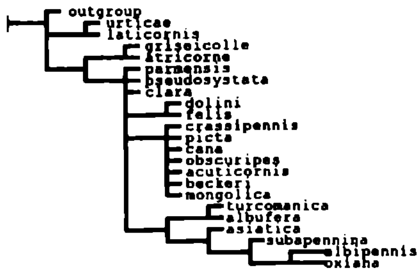
ANALYSIS 2: bb file 0 from mhennig 7 trees
bb length 230 ci 61 ri 82 trees 8

A



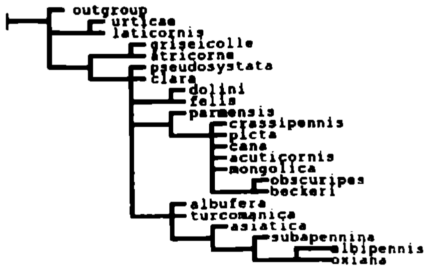
ANALYSIS 2: bb file 0 from mhennig 7 trees
bb length 230 ci 61 ri 82 trees 8

B



ANALYSIS 3: nelsen file 0 from bb 16 trees
tree 0 length 217 ci 58 ri 80

C



ANALYSIS 4: nelsen file 0 from bb 14 trees
tree 0 length 150 ci 73 ri 88

D

Fig. 2. Alternative cladograms obtained from the four subsequent HENNIG86 analysis with use of the successive weighting technique: *a, b* — Analysis 2: the two of the 8 most parsimonious trees from the mh bb* applications after character weighting: *c, d* — Analysis 3 and 4: the two Nelson consensus trees from the mh bb* application after character weighting.

Рис. 2. Альтернативные кладограммы, полученные в четырех последовательных анализах с использованием программы HENNIG86 и метода последовательных взвешиваний: *a, b* — Анализ 2: 2 из 8 наиболее парсимоничных деревьев, полученных с использованием опции mh bb* после взвешивания признаков: *c, d* — Анализ 3 и 4: два Нельсоновых консенсусных дерева, полученные с использованием опции mh bb* после взвешивания признаков.

v. *M. clara, M. pseudosystata* and *M. parmensis* share no valuable characters either one with another, or with other subgenera of *Melieria,* and I presently do not assign them to any subgenus.

vi. The species assigned to *Hypochra* share the pubescent arista with the species assigned to *Melieria* (s. str.). No valuable apomorphic characters were found neither to support the monophyly of *Hypochra* (in the sense of Soós, 1984), or to segregate several monophyletic groups instead of *Hypochra*. For this reason, all *Hypochra* species are to be incorporated into the genus *Melieria*, and the diagnosis of the latter must be refined.

Genus *Melieria* Robineau – Desvoidy

Robineau–Desvoidy, 1830: 715 Loew, 1868: 7; Rondani, 1869: 8, 17; Séguy, 1934: 62; Hennig, 1939: 44; Steyskal, 1962: 247; Richter, 1970: 127; Soós, 1971: 355; 1980: 79; 1984: 51; Kameneva, 1992: 28.— *Meliera*: Becker, 1905: 99; 1907: 279; 1912: 636 (error). — *Ceroxys* Macquart, 1835: 437; Schiner, 1860: 73 (p. p.). — *Ceroxys*: Loew, 1868: 6, non Macquart, 1835.— *Hypochra* Loew, 1846, syn. n. — *Phaeosoma* Becker, 1907.

T y p e - s p e c i e s : *Melieria gangraenosa* Robineau-Desvoidy, 1830 (by subsequent designation of Rondani (1869: 8) as: "*Sp. Typ.* Scatophaga crassipennis. Fabr. ", by synonymification of "*M. crassipennis* F a b r." with "*gangraenosa* D e s v . " (Rondani, 1869: 19)).

D i a g n o s i s. Grey tomentose flies with moderately to very acute 1st flagellomere, short to very long setulose, but never bare, arista, well-developed antennal grooves, moderately high genae, 2–7 dorsocentral bristles, acrostichal setae arranged into 2–6 more or less regular rows 1–2 supraalar bristles, 4 scut, vein R_1 setulose above in apical third, apices of R_{4+5} and *M* never approximated, long spinulose phallus, 2–5 prensisetae on surstylus and elongate, wrinkled spermathecae.

R e d e s c r i p t i o n. Small to middle-sized greyish flies (body length: 3–9 mm).

H e a d slightly higher than long. Frons setulose, matt, vitta not tomentose (except in *M. clara*, sp. n.); setae reclinate on orbital plates and sides of frons and proclinate or inclinate on antero-medial portion of vitta. Vertical plate with 2 **or** bristles, anterior pair is shorter than posterior. Ocellar bristle lateroclinate, usually 1.5–2 times shorter than anterior orbital bristle. Eye oval, *ca.* 1.5 times as high as long. Lunule small, with few setae. Face as high as wide, very slightly convex or straight, with low carina and indistinct depression below it; antennal grooves distinct, but not deep. Pedicel with moderately concave dorso-apical margin, without notch. 1st flagellomere elongate, moderately to very acute. Arista short to very long pubescent. Clypeus low and narrow, slightly shorter than parastomal cavity, not extended anteriorly. Parafacial *ca.* as wide as the 1st flagellomere. Gena rather high, 1/5–1/3 as high as vertical diameter of eye. Occiput not swollen. Postocellar bristles slightly divergent; **vti** and **vte** well-developed; **pvt** and **po** bristles small, seta-like. Genal bristle well-developed, postgenal and gular bristles long. Prementum rather small; never much longer than flagellomere 1, labellum fleshy; palpus narrow, linear.

T h o r a x , including subscutellum and postnotum, densely tomentose. Scutum tomentose, bare, slightly convex, with setae more or less distinctly arranged into rows. Scutellum slightly convex, tomentose, bare. Subscutellum rather small. Anepisternal suture indistinct. Proepisternal seta well-developed. Proepimeron rather short setulose. 1 postpronotal, 0 presutural supraalar, 2 notopleural bristles. 1–2 postsutural supraalar bristle just in front of wing base, 1 intraalar, 1 postalar, 0–1 (–3) presutural dorsocentral and 2–4 (–5) postsutural dorsocentral bristles; 0–1 acrostichal bristle just in front of level of posterior dc; 4 scutellars. 2 anepisternals; anepimeral bristles lacking. 1 long katepisternal bristle.

W i n g : hyaline, very finely microtrichose on entire surface. Costa with a more or less distinct humeral break, and indistinct subcostal break; 1–2 setae on ventral surface before costagial break rather short and stout; anterior surface with 3–4 rows of rather long and thin setae proximad of humeral break; 2 rows (anterior and antero-dorsal) of stout and shorter setae from humeral break to the apex of R_1; third, antero-ventral row of finer setae begins distal of apex of Sc; distally of the R_1 apex setae in the antero-ventral and anterior two rows distal of R_1 apex finer; no costal spurs; costa dorsally with ew additional setae distal of apex of vein R_1, more finely ciliate beyond apex of R_{2+3} vein costa is more finely ciliate. Vein Sc complete, bowed at blunt angle in apical portion. Stigma elongate. Vein R_1 setulose dorsally only along stigma; its apex is situated distally of middle of wing, and is aligned with M–Cu vein. Veins R_{4+5} and *M* parallel or slightly divergent. Cell r_{4+5} not narrowed towards apex. Vein CuA_2 slightly sinuate, cell cu*p* with very short postero-dorsal extension. Alula developed. Calypters rather narrow, with long cilia; ventral part of dorsal calypter shorter than ventral calypter, dorsally with posteriorly extended lobe.

L e g s : not modified, femora and tibiae setulose, forefemur with complete rows of bristles on postero-ventral and postero-dorsal surfaces and 3–5 bristles on dorsal surface in apical half, midfemur with 4–5 bristles on anterior surface, hindfemur with

2 subapical bristles on dorsal surface. Midtibia with 1–2 apical spurs and 3 bristles. Tarsi setulose, with dark enlarged setae on ventro-apical margin of tarsomeres 1–4. Claws simple.

A b d o m e n : densely microtomentose, without or, rarely, with subshining areas, rather densely setulose. In males protandrial segments as in all other Ulidiidae, moderately long, without spiracles. Hypandrium not connected to caudal portion of basiphallus. Gonites plate-like, slightly swollen, with few setae; parameres not produced, with 4–6 setae. Phallus moderately long and broad, with neither glans, nor sclerotized preglans, with two sclerotized taeniae on anterior surface, and with very long spinulae on caudal surface in its distal 3/4, and shorter spinulae on its medial 1/3–1/2; it is coiled and hidden in the rest into membranous pouch at ventral surface on right side of abdomen. Epandrium elongate, not expanded in antero-caudal direction. Surstyli joined to ventral portion of epandrium, rather large, with 2–4 prensisetae and few setae on inner surface. Cerci weakly sclerotized (except in *H. albufera* L y n e b o r g).

In female 6th abdominal tergum shorter than tergum 5th, but always visible from the above at least partially; spiracles 5 and 6 normally in lateral position, displaced dorsally (in *Paramelieria*); sterna 4–6 with long and narrow anterior apodemes. Terminalia very similar to those of other Ulidiidae. Tergosternum 7 large and flattened, microtomentose; eversible membrane without teeth-like squamae between taeniae, and with very fine multidentate scales on apical half; tergosternum 8 wrinkled, with dorsal and ventral rows of sensillar setae; cerci separated from it by suture; 4–6 moderately long cercal setae; 3 elongate wrinkled spermathecae sometimes with few papillae.

B i o l o g y. Little is known about larval feeding in *Melieria* and in Otitinae in general. Palaearctic *Ceroxys urticae* (L.) was recorded breeding in cesspools, but nothing was said about its food substrate (Lobanov, 1964). Only Nearctic *Tetanops myopaeformis* Röder and *Tritoxa flexa* Wd. Were confirmed as phytophagous, recorded from sugar beet and onion (Steyskal, 1987). The most important, but not yet confirmed information was given by Kabos and Van Aartsen (1984). According to them, larvae in most, if not all, European species of Otitini apparently are associated with living or rotting stems and roots of plants: *Ammophila* (Poaceae) — *Tetanops myopina* Fallén, *Luzula* (Juncaceae) — *Otites guttata* Mg., *Schoenus* (Cyperaceae) — *Herina palustris* Mg., *Artemisia maritima* (Asteraceae) — *Melieria picta* Mg. and *M. cana* Lw., *Phragmites* and other tall shore or wet meadow grasses — *Ceroxys urticae* L., *Melieria crassipennis* F. and *M. omissa* Mg. Adult flies of four species of *Melieria* (*Hypochra*) and *M.* (*Paramelieria*) were found in Turkmenistan in association with *Typha, Tamarix* and other vegetation on a very low clay bank of a river (see below), and two species of *M.* (*Hypochra*), and also *M. parmensis* were collected in association with *Juncus* (Juncaceae) and *Scirpus* (Cyperaceae).

Key to Palaearctic species of *Melieria* (other, than *Melieria* s. str. and *Phaeosoma*)

Таблица для определения видов *Melieria* (кроме *Melieria* s. str. и *Phaeosoma*)

1 (2). Presutural dc strong, if short (in *M. beckeri*) then 3–4 times longer than neighbouring setae, and anterior sa distinct **Subgenus *Melieria* s. str**.......... see: Soós (1971)

2 (1). Presutural dc lacking or short and weak, at most no more than 2.0 as long as neighbouring setae.3

3 (4). Genae half as high as eye.......... **Subgenus *Phaeosoma*.**

4 (3). Genae at most one-third as high as eye.......... 5

5 (6). Wing with apical crossband.......... 7

6 (5). Wing without apical crossband, wing apex, at most, indistinctly shaded.......... 13

7 (8). Smaller: WL < 4.5 mm. Apical wing crossband broad, partially confluent to subapical spot of cell r_1.Only one distinct sa. Four rows of ac setae. Arista moderately long pubescent, flagellomere 1 moderatelyacute.......... 9

8 (7). Larger: WL > 4.6 mm. Two distinct sa. Apex of wing with a narrow brown band. Six to eight rows of ac setae. Arista very long pubescent, flagellomere 1 strongly acute. Central Asia. **Subgenus *Parameliería* subgen. n**...11
9 (10). Veins r–m and dm–cu approximated, distance between them is less than dm–cu length. Wing with 3 complete light yellowish-brown crossbands. Flagellomere 1 partially brown. Central Asia...*M. pseudosystata*, sp. n.
10 (9). Veins r–m and dm–cu not approximated, distance between them is more than length of dm–cu. Wing with the medial crossband broken into two portions: at stigma and r–m and on dm–cu. Europe; Transcaucasia...*M. parmensis* Rondani
11 (12). All femora and usually middle tibiae yellow.Abdominal terga uniformly grey, without darker bands. Flagellomere 1 dark brown...*M. felis*, sp. n.
12 (11). Femora and tibiae black.Abdomen with brown crossbands at posterior margin of terga. Flagellomere 1 yellowish..*M. dolini*, sp. n.
13 (14). No prescutellar ac bristles. Anterior pair of sa seta-like or completely reduced...................15
14 (13). Prescutellar ac bristles well-developed.2 sa...17
15 (16). Anterior dc bristles between transverse suture and level of sa. No more than 2–3 very short presutural dc setae usually forming no distinct row. Central Asia.......*M. turcomanica*, sp. n.
16 (15). Anterior dc bristles on the level of sa. 6–8 presutural dc setae forming distinct row. Spain...*M. albufera* Lyneborg
17 (18). An additional, third pair of dc bristles in front of two posterior pairs is subequal to them and clearly longer than setae in front of it. WL > 4.7 mm. Europe, Transcaucasia. .... *M. subappenina* Rondani
18 (17). Only two pairs of dc bristles. WL various..19
19 (20). Wings hyaline, without dark spot at R_{2+3} apex, at most with very faint shadows on crossveins. Central Asia...21
20 (19). Wings with more or less distinct brown spots and shadows, at least at the apices of cells sc and r_1..23
21 (22). Flagellomere 1 black. Prescutellar ac half as long as posterior dc. WL>3.7 mm....*M. clara*, sp. n.
20 (21). Flagellomere 1 yellow. Prescutellar ac as long as posterior dc. WL<3.6 mm. ....*M. oxiana*, sp. n.
23 (24). Larger: WL > 3.6 mm. Dorsal surface of costal vein distal of R_1 apex with 9–11 thickened and 10–15 fine setae. Apex of r_{4+5} cell with narrow brownish shadow. Transcaucasia and Central Asia from Turkmenistan to Central China ....*M. asiatica* Hennig
24 (23). Smaller: WL < 3.5 mm. Dorsal surface of costal vein distal of R_1 apex with 0–4 fine setae. Apex of r_{4+5} cell without any brownish shadow. Europe, Central Asia.....*M. albipennis* Loew

Subgenus *Melieria* Robineau-Desvoidy, stat. n.

Melieria Robineau-Desvoidy: auctt. (see references above for the genus).

Diagnosis. Frontal vitta not tomentose; scutum with 1 (rarely 2–3) presutural **dc** (apomorphy); wing pattern various; 2 prensisetae on subapical portion of surstylus (apomorphy) and abdominal spiracles 5 and 6 situated latero-ventrally of the corresponding terga (in *M. crassipennis*).

Species included. Over 20 nominal species assigned to *Melieria* (Soós, 1984) are comprised herein; they were keyed and partially redescribed (Soós, 1971), but need further re-examination of all the primary types. This task is out of scope of the present paper, and will be the subject of a forthcoming revision (Kameneva, in preparation).

Subgenus *Phaeosoma* Becker

Phaeosoma Becker, 1908: 277; Soós, 1971: 351; 1984: 50. — *Hypochra* (*Phaeosoma*): Hennig, 1939: 41.

Type-species: *Phaeosoma nigricornis* Becker, 1908 (by monotypy).

Diagnosis. Frontal vitta densely tomentose; scutum with no presutural dc; wing pattern various; 0–2 prensisetae on subapical portion of surstylus and abdominal spiracles 5 and 6 situated latero-ventrally of the corresponding terga.

Discussion. Five species assigned to *Phaeosoma* (Soós, 1984) comprise 2 groups with rather different wing pattern and structure of male genitalia (Soós,

1971), and are scarcely different from species herein assigned to *Melieria*. Therefore, I do not recognize it as a separate genus. Its status and relationships of the species assigned to *Phaeosoma* will be considered in a forthcoming revision (Kameneva, *in preparation*).

Subgenus *Hypochra* Loew, stat. n.

Loew, 1868: 7; Mik, 1885: 277; Becker, 1905: 100; Hennig, 1939: 41; Richter, 1970: 127; Soós, 1971: 352; 1980: 78; 1984: 50; Kameneva, 1992: 28 (as a genus).

Type-species: *Ortalis albipennis* Loew, 1846 (by monotypy).

Diagnosis. Frontal vitta not tomentose; scutum without presutural dc; wing pattern reduced, apical crossband faint and narrow or completely absent; 3–5 prensisetae on subapical portion of surstylus (apomorphy) and abdominal spiracles 5 and 6 situated latero-ventrally of the corresponding terga (in *M. albipennis* and *M. subapennina*; this character is examined not for all species).

Species included. The subgenus includes *M.* (*H.*) *albipennis* (Loew), comb. n., *M.* (*H.*) *albufera* (Lyneborg), comb. n., *M.* (*H.*) *asiatica* (Hennig), comb. n., *M.* (*H.*) *oxiana* Kameneva, sp. n., *M.* (*H.*) *subapennina* Rondani, and *M.* (*H.*) *turcomanica* Kameneva, sp. n.

Melieria (*Hypochra*) *albipennis* (Loew), comb. n. (Fig. 3.)

Ortalis albipennis Loew, 1846: 93; *Hypochra albipennis* (Loew, 1846): Loew, 1868: 7; Becker, 1905: 100; Hennig, 1939: 42; Soós, 1984: 50.

Type material. Holotype: ♀ Greece: ["die Gegend von Xanthus" = Xanthi] (collector not given) (ZMHB), with the labels: "Griechenland/ H. Loew " (handwritten), "Ortalis albipennis/ Lw." (handwritten), "*Hypochra*" (handwritten) (ZMHB). Non-type material. 71 ♂, 64 ♀: Italy: [Lombardia, Bergamo's Alps] Sondrio, [Bezzi] ("coll. Oldenberg"; "W. Hennig/ cum typ. comp.") (DEI); "Triest" 19.07.1899 (collector not given) (coll. Oldenberg; "W. Hennig/ cum typ. comp.") (DEI); Kazakhstan: "Djulek, Orenburgh–Tashkent railroad, Syr–Daria", [19]10 (Kozhanchikov); Bokkary, lower stream of Ili, 8.03.[19]03 (Berg); Gheorghievka [40 km N of Bishkek], 20.07.1929 (Madashov) (ZISP); Chundja, 24.07.1990 (Nesterov) (IZK); Uzbekistan: "Farab, N. –W. Buhara", 5.05.1912, 17, 23, 25.04.1913 (Hohlbeck); Kumak, 19.05.1929 (Zimin); Turkmenistan: Chardjev veloyat, bank of Amu–Daria, prope Kerki, 26.04.1985 (Dolin) (IZK); idem, 16–17, 21.05.1934, Kerkichi — Surkhi, 20.05.1934 (Luppova); Surkhi, 20.05.1934 (Bregetova); prope Karabekaul, on *Typha* spp. and *Tamarix*, 12.05.1992.(Korneyev) (IZK); Uzbekistan/?Turkmenistan: "Amu–Daria", 16.05.1875 (Millberg) (ZISP); Tadjikistan: Pendjikent, Zeravshan valley, 17.10.1943 (Nikolskaya); Khanak, Ghissar valley, 11.06.1936 (Zimin); Ghissar ridge, Kondara ravine, 9.05.1961 (Loginova); "Stalinabad" (= Dushambe), 2.08.1942 (Gussakovsky); idem, valley of Dushambinka, 13.05.1943; idem, valley of Kafarnigan, 2.07.1944 (Stackelberg), Djilikul on Vakhsh, 14.06.1934, 12, 26.06 1941 (Gussakovsky) (ZISP); Aivadj, lower stream of Kafarnigan, 8.09.1934, (Zhelokhovtsev) (ZMUM); vicinity of Kul'ab, 12, 26.07, 6.08.1933, (V. Popov); "Kirovabad on Piandj", 11–12.07.1943 (Stackelberg) (ZISP).

Redescription. Male. Head ratio (length: height: width) = 1: 1.5: 1.7. Frons 1.0–1.2 times as long as wide, conspicuously narrowed posteriorly; ocellar triangle, vertical plates and fronto-orbital plates yellow, densely grey tomentose; frontal vitta opaque, light yellow, with a row of 10–13 proclinate setae above the lunula, a row of 8–10 lateroclinate setae at fronto-orbital plates and 10–20 reclinate setae at the middle. 2 pairs of strong orbital bristles. Parafacial yellow, white tomentose, with a row of rather long setae; genae yellow, grey tomentose, 0.23 – 0.25 times as high as eye. Eye 1.4–1.5 times as high as long. Face white, microtomentose, subhyaline, a little higher than wide. Facial carina low, and antennal grooves shallow. Antennae yellow, scape and pedicel with black setae; 1st flagellomere whitish microtrichose; arista pubescent, yellowish brown in basal half, brown in the rest. Clypeus brown, grey tomentose, 0.12–0.13 as high as face. Mouthparts brownish–yellow, prementum (= theca) brown, shining. Palpi narrow, yellow, with black setae. Occiput with one complete row of postocular setae.

Thorax: Yellowish-brown to black, densely grey tomentose, with 2 pairs of pale brown stripes, often indistinct. Scutum 1.0–1.17 times as long as wide. Scutellum and subscutellum brown, grey microtomentose. 2 posterior dc *ca*. Twice (or more) longer than anterior, dc seta–like; ac setae arranged into 4–6 more or less distinct rows; prescutellar ac bristles long, *ca*. as long as dc; an additional pair of seta–like bristle in front of sa. All the bristles and setae black.

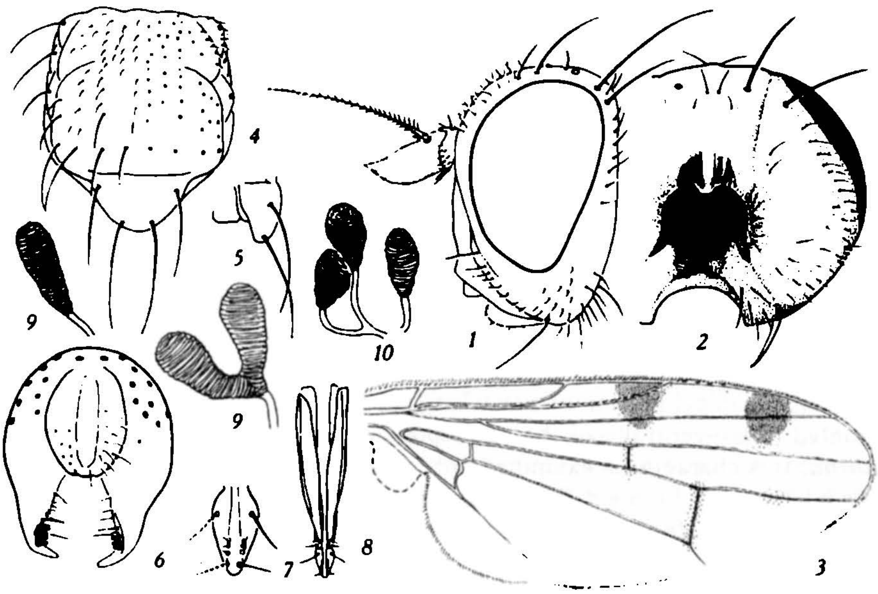


Fig. 3. *Melieria (Hypochra) albipennis*: *1* — head, left lateral view; *2* — same, posterior view; *3* — wing; *4* — scutum; *5* — scutellum, left lateral view; *6* — epandrium, posterior view; *7* — aculeus, ventral view; *8* — same, enlarged; *9–10* — spermathecae.

Рис. 3. *Melieria (Hypochra) albipennis*: *1* — голова, слева; *2* — то же, сзади; *3* — крыло; *4* — щит среднеспинки; *5* — щиток, сбоку; *6* — эпандрий, сзади; *7* — лезвие яйцеклада, вентрально; *8* — то же, увеличено; *9–10* — сперматеки.

W i n g: hyaline, whitish microtrichose, 0.36–0.39 times as wide as long; costal vein yellowish, with 2–7 sparse setae on dorsal surface distal of R_1 apex; Cells bc and c hyaline; sc brown in apical half. Indistinct light brown subbasal crossband extends from R_1 to M, usually indistinct; discal band broken into two spots: behind pterostigma in r_1 and around R–M crossvein. Two short subapical spots; the first extends from apical third of r_1 to the middle of the apical section of M; the second surrounds DM–Cu crossvein and is broadly separated from the first. No apical crossband. Length 2.5–3.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

L e g s: Yellow, with black bristles and setae. Femora greyish tomentose. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spurs, and 3–5 thickened setae, nearly equal in length to surrounding setae. Hindtibia with anterodorsal row of bristles, 2–3 times longer than surrounding setae, and ventro-apical row of thickened setae. Tarsi with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres 1–3 of midtarsi with ventral areas, and tarsomere 4 with 2 ventral rows of thickened setae. Hindtarsi whitish setulose ventrally and black setulose dorsally, except the base of tarsomere 1 with 2 short (1/4 of tarsomere width) rows of longer and thicker, black setae. Claws black.

A b d o m e n: Brown to black, uniformly and densely grey tomentose, with setae and bristles black. Postabdomen as shown on Fig. 3, *6*. Surstyli broad basally, with 3–4 prensisetae of subapical position; one of them elongate cuneiform.

F e m a l e. Similar to male in general features. 5th tergum 2.5 times as long as tergum 6. Tergosternum 7 grey tomentose, 3–3.5 times longer than tergum 6 and 0.5–0.6 times as long as cell c2. Terminalia as shown on Figs. 3, *7–10*.

Melieria (Hypochra) albufera (Lyneborg), comb. n. (Fig. 4.)

Hypochra albufera Lyneborg, 1969: 32; Soós, 1984: 50.

T y p e m a t e r i a l. H o l o t y p e: ♂: Spain: Almeria, Albufera 8.03.1966 (Lyneborg) (ZMUC) (not examined); P a r a t y p e s: 2 ♂, ♀: ibid., "Paratypus/ Hypochra/ albufera n. sp. / Lyneborg 1967" (IZK) (exchanged from Zoologisk Museum, Universitets Copenhagen), ♂, with the same labels (DEI) (examined); 10 ♂, 3 ♀, with the same labels (ZMUC); ♂, Granada, Rio Guadalfeo, Orgiva, 300 m, 19.04.1966 (Hackman) (ZMUH) (not examined).

R e d e s c r i p t i o n . M a l e . Head ratio = 1: 1.4: 1.7. Frons conspicuously narrowed posteriorly, as long as wide at anterior margin, 1.3–1.5 times longer, than its posterior margin; ocellar triangle, vertical plates and fronto-orbital plates yellow, densely whitish tomentose; frontal vitta opaque, yellow, with 18–22 inclinate setae above the lunula and at the middle, some reclinate laterally, and a row of 7–8 lateroclinate setae at fronto-orbital plates; 2 pairs of orbital bristles, anterior weak, 0.25–0.3 times as long as posterior one. Parafacial yellow, opaque, with the extremely narrow white tomentose stripe at eye margin, with a row of moderate long setae; genae yellow opaque, with narrow white tomentose stripe at eye margin, 0.37 – 0.40 times as high as eye. Eye 1.1–1.2 times as high as long. Face light yellow, microtomentose, subhyaline, 1.0–1.2 times higher than wide. Facial carina low in lower portion slightly concave in profile, and antennal grooves not deep. Antennae yellow, scape and pedicel with black setae; 1st flagellomere whitish microtrichose; arista pubescent, yellowish brown in basal half, brown in the rest. Clypeus brownish-yellow, grey tomentose, sublinear, hidden in parastomal cavity. Mouthparts brownish-yellow, prementum yellow, shining. Palpi narrow, yellow, with black setae.

T h o r a x: black, except postpronotal lobes, notopleura and scutellum yellow, densely grey tomentose, without stripes. Scutum 1.05–1.15 times as long as wide. Subscutellum black, grey microtomentose. 2 pairs of dc, anterior dc bristle at the level of sa; 3–5 postsutural setae in front of them 0.25–0.30 as long as dc bristle; 6–8 presutural dc setae form distinct row; ac setae arranged into 4 rows; prescutellar ac short, not longer than other ac setae; only a setula in front of single pair of sa. All the bristles and setae black.

Wing: hyaline, whitish microtrichose, 0.36–0.38 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 5–8 rather sparse, thickened setae, subequal to those of anterior surface and conspicuously thicker than those on apical portion of Sc. Cells bc and c hyaline; sc brown in apical third. Subbasal crossband indistinct, performed only as brown tinged portions of R_{4+5} and M; discal one broken into two grey shadows: behind pterostigma in r_1 and around R–M crossvein, with the veins inside it black. Two grey, shadow-like, indistinct subapical spots; the first extends from apical third of r_1 to the middle of the apical section of M; the second surrounds DM–Cu and is broadly separated from the first. Length 3.9–4.8 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs: yellow, with black bristles and setae. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spurs, and 3–5 thickened bristles, subequal in length to the shorter one. Hindtibia with anterodorsal row of bristles not conspicuously longer than surrounding setae, and ventro-apical row of 3–4 thickened setae. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres 1–4 of midtarsi with 2 ventral rows of thickened setae. Hindtarsi whitish setulose ventrocaudally and black setulose dorsally; the base of tarsomere 1 with 1–2 caudoventral black thickened setae and anteroventral row of rather short (1/5–1/6 of tarsomere width) of thickened black setae; tarsomeres 2–4 with two short subapical rows of two or three black setae. Claws black.

A b d o m e n: black, yellowish at base, densely grey tomentose, with setae and bristles black. Postabdomen as shown on Fig. 4, *5*, *6*. Epandrium with a row of extremely long bristles directed backwards; cerci large and sclerotized.

F e m a l e . Similar to male in general features. Tergum 5 nearly twice as long as tergum 6. Tergosternum 7 grey tomentose, 1.6 times longer than tergum 6 and 0.35 as long as cell c_2. Terminalia not dissected.

Melieria (*Hypochra*) *asiatica* (Hennig), comb. n. (Fig. 5).

Hypochra asiatica: Hennig, 1939: 42; Soós, 1984: 50; Kameneva, 1992: 28.

T y p e m a t e r i a l . H o l o t y p e : ♀: China: "Kina/ S. Kansu" (printed label), 21.06.[? year] ("Swen Hedins/ Exp. Ctr. Asien/ Dr. Hummel") (NHMV) "Hypochra/ F. Hendel det. ", "coll. Hendel", " handwriting on white paper), "TYPE" (printed on red paper) (NHMV); Paratypes: ♀: China: Nan–Shan "MUSEUM PARIS / Nan-Chan de Kan Tcheou a Lan Tcheou D. L. Vaillant 1909", "2000=400 m. /Juillet 1908" (Vaillant) (handwritten with red ink); "Paratypus" (printed on red square of paper; "1972" handwritten on reverse: "1972") (DEI); ♂, 2 ♀ : China: Nan–Shan "MUSEUM PARIS / Nan-Chan de Kan Tcheou a Lan Tcheou D. L. Vaillant 1909", "2000–4000 m. /Juillet 1908" (Vaillant) (MNHP) (not examined). N o n - t y p e m a t e r i a l . 19 ♂, 10 ♀: Azerbaiçan: "A<l>çigan–çay <riv.>, steppe Turut" [20 km E of Mingeçaur], 19.05.1948 (Bogachev) (ZISP); Kazakhstan: "Perovsk" [= Kzyl-Orda], 14.05.1925 (Zhelokhovtsev) (ZMUM); lower stream of Ili: Bokkary, 8.07, idem, Urpek, 9.07.1903, idem, 10.07, 7.09.1903 (Berg) (ZISP); Kazakhstan?: "Kazakh–Bugut" 2.09.1939 (Veltishchev); Uzbekistan: western provinces: Kzyl–Djar, 18 km E of Kungrad, 16, 20.06.1938 (Zimin) (ZISP); eastern provinces: "Aidarly–kul, Djarkent county", 20.07.1925 (Rohdendorf) (ZMUM); Tadjikistan: "Stalinabad" (= Dushambe), valley of Dushambinka and Botanical Garden, 13.05.1943; vicinities of Kulab, 26.07.1933, (V. Popov (ZISP); Turkmenistan: Tashauz, 17.05.1931 (Ushinsky) (ZISP); Chardjev veloyat (= Chardzhou reg.) Kerki, bank of Amu-Daria, 26.04.1985 (Dolin) (IZK).

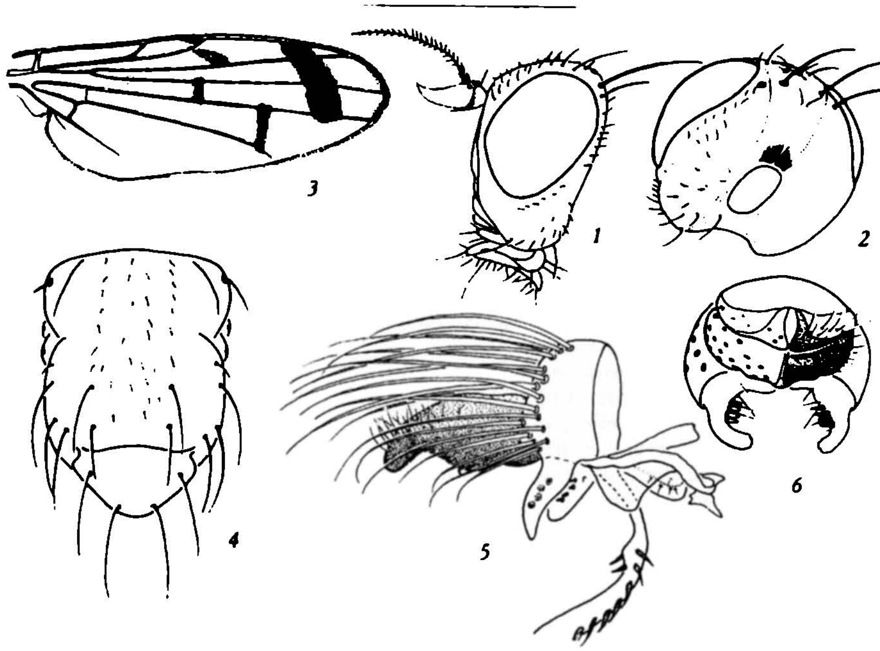


Fig. 4. *Melieria* (*Hypochra*) *albufera*: *1* — head, left lateral view; *2* — same, postero-dorsal view; *3* — wing; *4* — scutum; *5* — male genitalia, right lateral view; *6* — epandrium, posterior.

Рис. 4. *Melieria* (*Hypochra*) *albufera*: *1* — голова, слева; *2* — то же, сзади сверху; *3* — крыло; *4*— щит среднеспинки; *5* — гениталии самца, слева; *6* — эпандрий, сзади.

R e d e s c r i p t i o n . M a l e . Head ratio = 1: 1.4: 1.7. Frons 0.8–1.1 times as long as wide, conspicuously narrowed posteriorly; ocellar triangle, vertical plates yellow, densely grey tomentose; fronto-orbital plates and frontal vitta opaque, light yellow, with 8–12 proclinate setae above the lunula, a row of 8–12 proclinate setae at fronto-orbital plates and 10–12 reclinate setae at the middle. One pair of strong orbital bristles and a pair of additional setae 0.3–0.4 as long as bristle in front of them. Parafacial yellow, opaque, with a row of rather long setae; genae yellow, grey tomentose, 0.22–0.25 times as high as eye. Eye 1.4–1.6 times as high as long. Face white, microtomentose, *ca.* 1.1–1.2 times wider than high, slightly concave below in profile. Facial carina low, and antennal grooves not deep. Antennae yellow, scape and pedicel with black setae; 1st flagellomere whitish microtrichose; arista pubescent, yellowish brown in basal half, brown in the rest. Clypeus yellow, grey tomentose, 0.1 as high as face. Mouthparts brownish–yellow, prementum yellow, shining. Palpi narrow, yellow, with black setae. 2 rows of postorbital setae.

T h o r a x : black, densely grey tomentose, without dark stripes, postpronotal lobes yellow. Scutum 1.1–1.15 times as long as wide. Scutellum yellow, subscutellum brown, grey microtomentose. 2 posterior dc more than 2 times longer than anterior, seta-like dc; ac setae arranged into 4(6) more or less distinct rows, prescutellar ac bristles long; an additional pair of bristles in front of sa ca. half as long as sa. All the bristles and setae black.

Wing: hyaline, whitish microtrichose, 0.39–0.42 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 7–9 rather sparse thickened setae, subequal to those ones of anterior surface and 10–17 conspicuously finer setae(subequal to those ones on apical portion of Sc) distributed between them. Cells bc and c hyaline; sc brown in apical 1/5–1/7.Subbasal crossband very indistinct or absent; discal crossband light brown, broken into two spots: behind pterostigma in r_1 and around R–M crossvein. Two short subapical spots; the first extends from apical third of r_1 into r_{2+3}; the second surrounds DM–Cu and is broadly separated from the first; apical crossband reduced to brownish shadow, inconspicuous. Length 3.5–5.0 mm. Calypters light yellow, with whitish cilia. Halters yellow.

L e g s : yellow, with black bristles and setae. Femora completely yellow. Midtibia ventro-apically with one spur as long as tibia width and three shorter spurs nearly as long as width of tibia, and dorso-apically with 2 thickened setae, 2–3 times longer than surrounding setae. Hindtibia in apical half with anterodorsal row of bristles, 2–3 times longer than surrounding setae, and ventro-apical row of thickened setae. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres

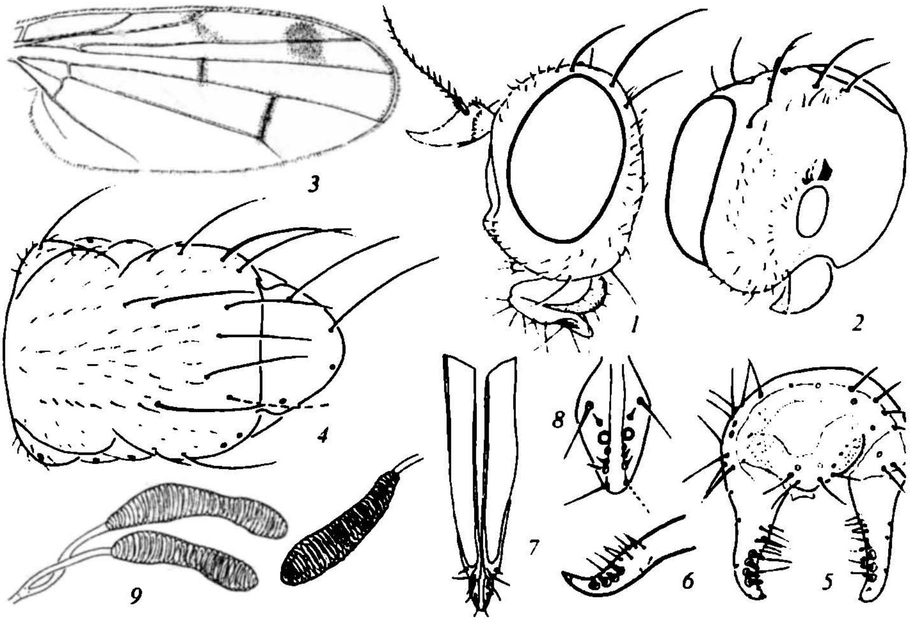


Fig. 5. *Melieria (Hypochra) asiatica*: *1* — head, left lateral view; *2* — same, left postero-dorsal view; *3* — wing; *4* — scutum; *5* — epandrium, posterior view; *6* — right surstylus, left lateral view *7* — aculeus, ventral view; *8* — same, enlarged; *9* — spermathecae.

Рис. 5. *Melieria (Hypochra) asiatica*: *1* — голова, слева; *2* — тоже, постеро-дорсально и слева; *3* — крыло; *4* — щит среднеспинки; *5* — эпандрий, сзади; *6* — правый сурстиль, слева *7* — лезвие яйцеклада, вентрально; *8* — то же, увеличено; *9* — сперматеки.

1–4 of midtarsi with 2 ventral rows of thickened setae. Hindtarsi whitish setulose ventrally and black setulose dorsally, except the base of tarsomere 1 with 2–4 longer and thicker, black setae. Claws black.

Abdomen: black, densely and uniformly grey tomentose (or sometimes with hind margins of terga very light brown), with setae and bristles black. Postabdomen as shown on Figs 5, *5, 6* Surstyli with 4 subapical prensisetae.

Female. Similar to male in general features, differing as follows. Tergum 5 three to five times as long as tergum 6. Tergosternum 7 sparsely grey tomentose, 2–4 times longer than tergum 6 and 0.45–0.5 times as long as cell c_2. Terminalia as shown on Figs 5, *7–9* i. Spermathecae rather long, wrinkled, without papillae.

Melieria (Hypochra) oxiana Kameneva, sp. n. (Fig. 6).

Type material. Holotype ♂: Turkmenistan: Chardjev veloyat, bank of Amu-Daria, prope Kerki, 26.04.1985 (Dolin) (IZK). Paratypes: Uzbekistan: Kumak, 19.05.1929 (Zimin) (ZISP); Turkmenistan: "Kara-Chokat, M. Barsuki", 20.06.1930, ♂ (Bianki); Amu-Daria, 90 km below of Chardjev, 30–31 05.1965, 4 ♂, 4 ♀ (Tanasijchuk, Nartshuk); "Farab, N. -W. Buhara", 5.05.1912, ♂ (Hohlbeck); prope Kerki, 17.05.1934, ♂ (Luppova) (ZISP); same label data, as in the holotype, 3 ♂, ♀, (DEI, NHMV, ZMUC), bank of Amu-Daria prope Karabekaul, on *Typha* spp. and *Tamarix*, 12.05.1992, 9 ♂, 4 ♀ (Korneyev) (ZMHB, IZK); Tadjikistan: Djilikul on Vakhsh, 12, 18, 28.06.1941, ♂, 3 ♀ (Gussakovsky) (ZISP).

Description. Similar to *M. (H.) albipennis*, differing as follows.

Male. Frontal vitta light yellow, with a row of 6–12 proclinate setae above the lunula, a row of 4–10 lateroclinate setae at fronto-orbital plates and 16–24 reclinate setae at the middle. Second row of postorbital setae incomplete or lacking.

Thorax: Yellowish-brown to black, densely grey tomentose, without stripes, or rarely with very indistinct stripes. Scutum 1.0–1.2 times as long as wide. Scutellum yellowish-brown, subscutellum brown to black, grey microtomentose.

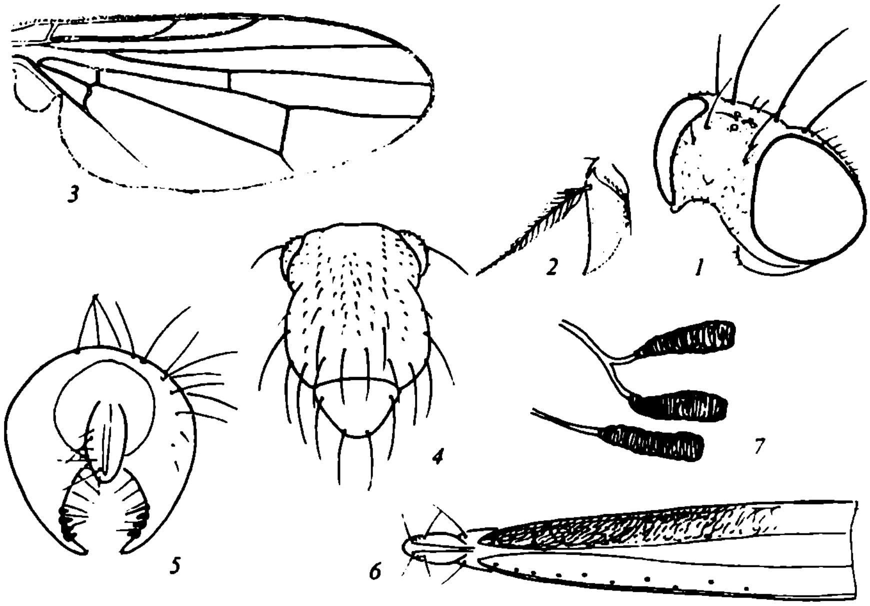


Fig. 6. *Melieria* (*Hypochra*) *oxiana*: *1* — head, left antero-dorsal view; *2* — flagellomere I (enlarged), left lateral view; *3* — *wing*; *4* — scutum; *5* — epandrium, posterior view; *6* — aculeus, ventral view; *8* — spermathecae.

Рис. 6. *Melieria* (*Hypochra*) *oxiana*: *1* — голова, антеро–дорсально и слева; *2* — 1–й флагелломер (увеличено), слева; *3* — крыло; *4* — щит среднеспинки; *5* — эпандрий, сзади; *6* — лезвие яйцеклада, вентрально; *8* — сперматеки.

Wing: hyaline, whitish microtrichose, 0.38–0.43 times as wide as long; costal vein yellowish, with 2–7 sparse setae on dorsal surface distally of R_1 apex conspicuously more robust than those on R_1. Wing completely hyaline with veins light yellow to whitish. Length 2.5–3.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Abdomen: Brown to black, uniformly and densely grey tomentose, with setae and bristles black. Postabdomen as shown on Figs 6, *5*. Surstyli broad basally, with 3–4 prensisetae.

Female. Similar to male in general features. Tergum 5 four to five times as long as tergum 6. Tergosternum 7 grey tomentose, 5 times longer than tergum 6 and 0.5–0.6 as long as cell c_2. Terminalia as shown on Figs 6, *6*, *7*. Spermathecae rather short, wrinkled, without papillae.

Melieria (*Hypochra*) *subapennina* Rondani (Fig. 7).

Melieria subappenina Rondani, 1869: 18; *Hypochra subapennina* (Rondani, 1869): Mik, 1885: 282; Becker, 1905: 100; Hennig, 1939: 44; Soós, 1983:256; 1984: 50.

Type material. Lectotype: ♀: Italy: "1602", "Apnn. " ". . . in collibus agri parmensis. . . ", ". . . in Pedemontio. . . "] (MZF) (designated by Soós) (not examined). Non-type material. 18 ♂, 24 ♀: Austria: "Salisburg/ Aigen" (date not given) (Mik); "coll. Mik" (locality, date and collector not given) (NHMV); Italy: "Bozen" [= Bolzano], 10.06 1914 (collector not given) (DEI); [Lombardia, Bergamo's Alps] Sondrio 21.04.1898 [Bezzi] ("*Hypochra subapennina* Rd. / M. Bezzi det") (DEI); "P[orto] Civitan[uova] 20.07.1905 (Bezzi) (NHMV); Azerbaican : "A<I>çigan–çay <riv.>, steppe Turut" [20 km E of Mingeçaur], 19.05.1948 (Bogachev) (ZISP).

Redescription. Male. Head ratio = 1: 1.4: 1.7. Frons 0.7–0.9 times as long as wide, conspicuously narrowed posteriorly; ocellar triangle, vertical plates and fronto-orbital plates yellow, densely grey tomentose; frontal vitta opaque, light yellow, with a row of 7–9 proclinate setae above the lunula, a row of 10–12 lateroclinate setae at fronto-orbital plates and 10–12 each of inclinate and reclinate setae at the middle. 2 pairs of strong orbital bristles, the anterior half as long as the posterior one. Parafacial yellow, white tomentose, with two rows of rather long setae; gena yellow, grey tomentose, 0.20 – 0.25 times as high as eye. Eye 1.5–1.6 times as high as long. Face white, microtomentose, subhyaline, a little wider than high. Facial carina very low, and antennal

grooves not deep. Antennae yellow, scape and pedicel with black setae; 1st flagellomere whitish microtrichose; arista pubescent, yellowish brown in basal half, brown in the rest. Clypeus yellow or brown, grey tomentose, 0.12–0.13 as high as face. Mouthparts brownish–yellow, prementum yellowish–brown, shining. Palpi narrow, yellow, with black setae. Occiput yellow, white tomentose with 2 rows of po setae.

T h o r a x : yellow to black, densely grey tomentose, with 2 pairs of pale brown stripes. Scutum 1.0–1.2 times as long as wide, black, postpronotal lobes yellow in the middle. Scutellum yellow; subscutellum black, grey microtomentose. 2 posterior dc nearly as long as anterior, the third pair of dc; 5–7 anterior dc setae conspicuously (1.3–1.5 times) longer than neighbouring setulae and form distinct row; ac setae arranged into 4 distinct rows, posterior setulae, and prescutellar ac bristles long; an additional pair of seta–like bristle in front of sa half as long as the latter. All the bristles and setae black.

W i n g : hyaline, whitish microtrichose, 0.36–0.42 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 10–15 thickened setae (similar to that on antero-dorsal edge of this portion of costa) and 10–12 thin setae (like those on antero-ventral surface). Cells bc and c hyaline; sc brown in apical half. The subbasal crossband reduced to brownish shadow between R_1 and R_{2+3}, reaching M in Transcaucasian specimens; discal one is broken into two spots: behind pterostigma in r_1 and around R–M crossvein. Two short subapical spots; the first extending from apical third of r_1 to the middle of r_{2+3} cell; the second surrounding DM–Cu and broadly separated from the first. Apical brown shadow indistinct. Length 4.2–5.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

L e g s : yellow, with black bristles and setae. Femora yellow, whitish tomentose. Midfemur with 4–5 strong bristles on medial portion of anterior surface and 3–4 on apical portion of posterior surface. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spurs, and 3–5 spur–like setae, nearly equal in length to surrounding setae. Hindtibia with anterodorsal row of bristles, 2 times longer than surrounding setae, and ventro-apical row of thickened setae, including one longer spur. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely yellowish setulose on ventral surface. Tarsomeres 1–4 of midtarsi with 2 ventral rows of thickened setae. Hindtarsi yellowish setulose ventrally and black setulose dorsally, except the tarsomere 1 with anteroventral row of black setae converting into arched row of longer and thick at base, but extremely acute setae on ventro-basal part and then going on the basal 1/4 of postero-ventral surface. Claws black.

A b d o m e n : brown to black, densely grey tomentose (or with narrow brown tomentose margins of terga 2–6), with setae and bristles black. Postabdomen as shown on Figs 7, *4*, *5*. Surstyli with 4–5 subequal prensisetae.

F e m a l e . Similar to male in general features. 5th tergum 2.5–3.5 times as long as tergum 6. Tergosternum 7 grey tomentose, 3–3.5 times longer than tergum 6 and 0.5–0.6 as long as cell c_2. Terminalia as on Figs 7, *6–8*; 3 elongate, wrinkled spermathecae without papillae.

Melieria (*Hypochra*) *turcomanica* K a m e n e v a, sp. n. (Fig. 8).

T y p e m a t e r i a l . H o l o t y p e ♂: Turkmenistan: Chardjev veloyat, bank of Amu–Daria, prope Kerki, 26.04.1985 (Dolin) (IZK). Paratypes: Kazakhstan: ♂, 2 ♀: "Syr-Daria Geb., Perovsk" [= Kzyl-Orda], 14.05.1925 (Zhelokhovtsev) (ZMUM); Turkmenistan: ♂: "B. Balkhany (at Oglaily)", 24.04.1985 (Dolin) (IZK); ♂, Chardjev, tugais at Amu–Daria bank, 6.07.1957 (Tyshchenko) (ZISP); 2 ♂, 2 ♀: Kerkichi — Surkhi, 20.05.1934 (Luppova); 3 ♂, ♀, the same label data (DEI, NHMV, ZMUC), bank of Amu–Daria prope Karabekaul, on *Typha* spp. and *Tamarix*, 12.05.1992.9 ♂, 4 ♀ (Korneyev) (ZMHB, IZK). Non-type material. Kazakhstan: 2 ♂, 2 ♀: lower stream of Ili, 7–9.03.[19]03 (Berg) (in poor condition).

D e s c r i p t i o n . Middle-sized flies of yellowish–grey appearance and reduced wing pattern. Similar to *M. albipennis*, differing as follows.

M a l e . H e a d ratio = 1: 1.2: 1.3. Frons 1.1–1.2 times as long as wide, somewhat narrowed posteriorly; ocellar triangle brownish–yellow, vertical plates and fronto-orbital plates yellow, densely white tomentose; frontal vitta with a row of 6–8 proclinate setae above the lunula, and 10–15 proclinate, inclinate and reclinate setae at the middle. 1 pair of strong orbital bristles, anterior orbital bristle seta–like, 1/3–1/4 as long as posterior. Genae yellow, grey tomentose, 0.40 – 0.45 times as high as eye. Eye 1.2–1.3 times as high as long. Face, 1.1–1.2 times higher than wide. Antennae yellow, 1st flagellomere extremely acute at its apex, whitish microtrichose; arista pubescent, brown. Clypeus yellow to dark brown, grey tomentose, 0.1 as high as face. Mouthparts: prementum yellow to brown. Occiput completely yellow or grey in the middle. Second row of po incomplete.

T h o r a x: yellowish–brown to black, densely grey tomentose, with 2 pairs of pale brown stripes. Scutum 1.15–1.25 times as long as wide. Scutellum yellow, subscutellum brown, grey microtomentose. 2 dc bristles, anterior one between the level of sa and transverse suture, more than 4–5 times longer than dorsocentral setae in front of it; ac setae sparse, arranged into 2–4 more or

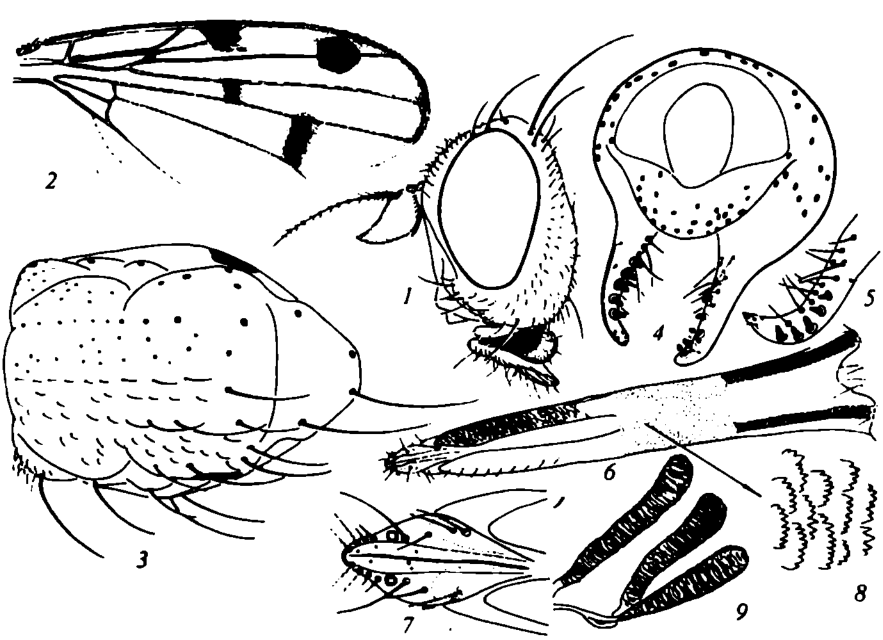


Fig. 7. *Melieria* (*Hypochra*) *subapennina*: *1* — head, left lateral view; *2* — same, right postero-dorsal view; *3* — *wing*; *4* — scutum; *5* — epandrium, posterior view; *6* — right surstylus, left lateral view; *7* — aculeus and eversible membrane, ventral view; *8* — enlarged; *9* — scales, enlarged; *10* — spermathecae.

Рис. 7. *Melieria* (*Hypochra*) *subapennina*: *1* — голова, слева; *2* — то же, постеро–дорсально и справа; *3* — крыло; *4* — щит среднеспинки; *5* — эпандрий, сзади; *6* — правый сурстиль, слева; *7* — лезвие и выворачиваемая мембрана яйцеклада, вентрально; *8* — лезвие и *9* — шипики мембраны, увеличено; *10* — сперматеки.

less distinct rows, prescutellar ac bristles completely reduced, as well as the anterior pair of sa. All the bristles and setae black.

Wing: hyaline, whitish microtrichose, 0.35–0.41 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 2–4 thickened and 6–12 moderately fine setae, equal to those on R_1 and more fine than those ones on antero-dorsal edge of costa. Cells bc and c hyaline; sc yellowish. No subbasal crossband or spots. Discal one is reduced to a spot around R–M crossvein, sometimes r_1 cell behind stigma with faint brown shadow. One subapical spot; crossvein DM–Cu with brown shadow. Apical crossband indistinct. Length 3.2–4.1 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs: yellow, with black bristles and setae. Femora yellow, greyish tomentose. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spur, and 3–5 thickened setae, nearly equal in length to surrounding setae. Hindtibia without anterodorsal row of longer bristles, with 5–7 thickened setae and 3–4 longer spur-like bristles at ventro-apical portion. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres 1–4 of midtarsi with 2 ventral rows of thickened setae. Hindtarsi whitish setulose postero-ventrally and black setulose dorsally, except the base of tarsomere 1 with short antero-ventral row of somewhat longer and thicker, black bristles.

A b d o m e n: brown to black, densely grey tomentose, with setae and bristles black. Postabdomen as shown on Figs 8, *5, 6*. Surstyli with 4 prensisetae and claw–like apices, laterally covered with numerous setae, arising from large tubercle-like sockets.

F e m a l e. Similar to male in general features. Tergum 5 twice as long as tergum 6. Tergosternum 7 grey tomentose, 4 times longer than tergum 6 and 0.75–0.9 as long as cell c_2. Sterna 3–6 with long apodemes. Terminalia as shown on Figs 8, *7, 8*.

Subgenus *Paramelieria* K a m e n e v a, subgen. n.

T y p e - s p e c i e s: *Melieria* (*Paramelieria*) *dolini* Kameneva, sp. n.

D i a g n o s i s. Arista long setulose; frontal vitta not tomentose; scutum without presutural dc; wing pattern various; 2 prensisetae on subapical portion of surstylus

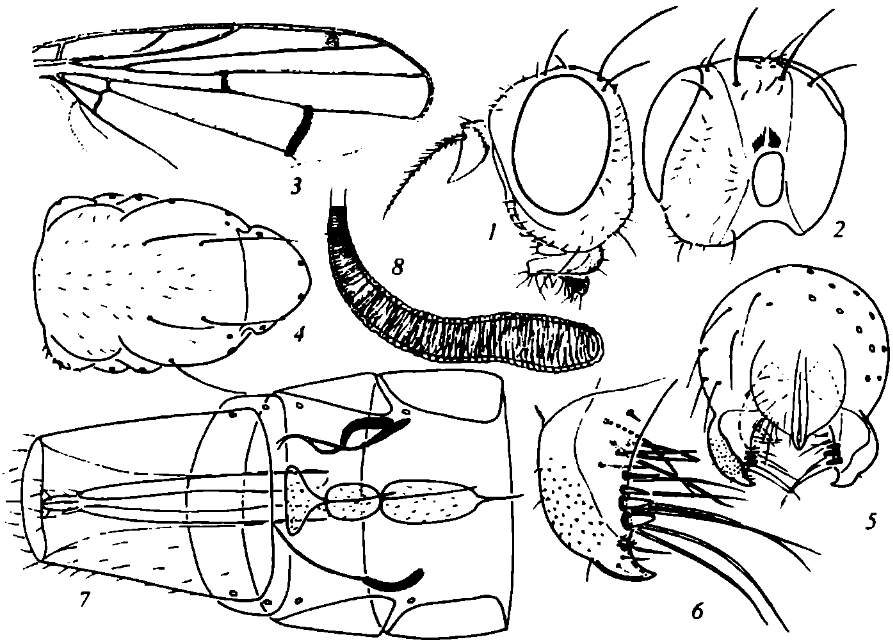


Fig. 8. *Melieria* (*Hypochra*) *turcomanica*: *1* — head, left lateral view; *2* — same, left postero-dorsal view; *3* — *wing*; *4* — scutum; *5* — epandrium, posterior view; *6* — left surstylus, posterior view, enlarged; *7* — abdominal terga 4–6 and female terminalia; *8* — spermathecae (one of the three, enlarged).

Рис. 8. *Melieria* (*Hypochra*) *turcomanica*: *1* — голова, слева; *2* — то же, постеро-дорсально и слева; *3* — крыло; *4* — щит среднеспинки; *5* — эпандрий, вид сзади; *6* — левый сурстиль, вид сзади, увеличено; *7* — 4–6 брюшные сегменты и терминалии самки; *8* — сперматека (одна из трех, увеличено).

(apomorphy?) and abdominal spiracular stigmae 5 and 6 situating postero-dorsally of the corresponding terga (apomorphy?).

Species included. The subgenus includes *M.* (*P.*) *dolini* Kameneva, sp. n. and *M.* (*P.*) *felis* Kameneva, sp. n. from Central Asia, and an unnamed species from East Siberia.

Melieria (*Paramelieria*) *dolini* Kameneva, sp. n. (Fig. 9).

Type material. Holotype ♂: Turkmenistan: Chardjev veloyat, bank of Amu-Daria, prope Kerki, 26.04.1985 (Dolin) (IZK). Paratypes: 76 ♂, 69 ♀: Uzbekistan: Kabakly on Amu-Daria, NW Buhara, 1.07.1910; Kumak, 16.05.1929 (Zimin) (ZISP); Turkmenistan: Kerki, same data as in the holotype (DEI, NHMV, ZMUC), "Chardzhui" [= Chardjev] 9–10, 20.05.1985 (A. Semenov) (ZISP); bank of Amu-Daria prope Karabekaul, on *Typha* spp. and *Tamarix*, 12.05.1992 (Korneyev) (ZMHB, IZK). Tadjikistan: "Stalinabad" (= Dushambe), valley of Dushambinka and Botanical Garden, 13, 27.05.1943; valley of Lugob, 1.07.1943; valley of Kafarnigan, 20.05.1943, 2.07.1944 (Stackelberg); Djilikul on Vakhsh, 14, 15.06.1934, 12.06.1941 (Gussakovsky); vicinities of Kul'ab, 25.07 - 3.08.1933, (V. Popov) (ZISP).

Description. Male. Head ratio = 1: 1.3: 1.6. Frons 1.0–1.2 times as long as wide, conspicuously narrowed posteriorly; ocellar triangle, vertical plates and fronto-orbital plates and frontal vitta yellow, densely grey tomentose except very small bare area in front of triangle and medial strip; frontal vitta with 2 rows including 16–20 rather long proclinate setae above the lunula, a row of 10–12 lateroclinate setae at fronto-orbital plates and 30–40 inclinate and reclinate setae at the middle. 2 pairs of strong orbital bristles. Parafacial yellow, white tomentose, with a row of rather long setae; genae yellow, white tomentose, 0.2 – 0.3 times as high as eye. Eye 1.5–1.6 times as high as long. Face white microtomentose, 1.2–1.3 times wider than high. Facial carina low, white tomentose, and antennal grooves not deep, subshining. Antennae yellow, scape and pedicel with black setae; 1st flagellomere somewhat brownish at anterolateral surface, whitish microtrichose; arista very long

pubescent, brown. Clypeus brownish-yellow, grey tomentose, 0.07–0.1 as high as face. Mouthparts brownish-yellow, prementum yellow to black, shining. Palpi narrow, yellow, with rather strong black setae. Occiput yellow, white tomentose, with 2 complete rows of postocular setae.

Thorax: brown to black, densely grey tomentose, without stripes. Scutum 1.2–1.3 times as long as wide. Postpronotum brownish-yellow; scutellum and subscutellum brown, grey microtomentose. 2 posterior dc ca. 1.5–2 as long as 1–2 pairs of postsutural dc in front of them; presutural dc a little longer than neighbouring setae, form distinct row; ac setae form 6–8 rather irregular rows; prescutellar ac bristles very long, subequal to posterior dc; sa of anterior pair strong. All the bristles and setae black.

Wing: hyaline, whitish microtrichose, 0.37–0.39 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 25–30 uniformly thickened setae equal to those on antero-dorsal and antero-ventral edges of costa. Cells bc and c hyaline; sc brown in apical half. Light brown subbasal crossband is broken into spots below R_1 at the base of R_{4+5} and on BM–Cu crossvein, indistinct; discal one is broken into two spots: behind pterostigma in r_1 and around R–M crossvein. Two short subapical spots; the first extends from apical third of r_1 to the middle of the apical section of R_{2+3}; the second surrounds DM–Cu and is broadly separated from the first. Apical crossband brown. Length 5.0–6.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs: black (except knees), with black bristles and setae. Femora grey tomentose. Midfemur with 4–6 strong bristles on medial portion of anterior surface and 3–4 strong bristles on apical portion of posterior surface. Hindfemur with 3–4 long subapical bristles on antero-dorsal surface. Midtibia with 4–6 strong bristles on medial portion of anterior surface and ventro-apically with three long spurs, and 3–4 spur-like setae, 2–4 times longer than surrounding setae. Hindtibia with anterodorsal row of bristles, 2 times longer than surrounding setae, and ventro-apical row of thickened setae, including one longer spur. Tarsi black, with all setae black and tarsomeres 1–4 with 2 ventral rows of thickened setae. Tarsomere 1 of hindtarsi with anteroventral row of black setae converting into arched row of longer and thick at base, but extremely acute setae on ventro-basal part and then going on the basal 1/4 of postero-ventral surface. Claws black.

Abdomen: brown to black, densely grey tomentose, subshining brown to shining black in posterior 1/3 of terga, with setae and bristles black. Postabdomen as shown on Fig. 9, *6*. Surstyli rather narrow, with 2 prensisetae at apical third.

Female. Similar to male in general features. Tergum 5 two to three times as long as tergum 6. Tergosternum 7 grey tomentose, 2–2.5 times longer than tergum 6 and 0.3–0.4 as long as cell c_2. Three long spermatheca as shown on Fig. 9, *7* .

Melieria (*Paramelieria*) sp.

Material. Russia: East Siberia: Transbaikalia, Tshita reg., Dahurian Natural Reserve, Bulum, 1.07.1990, ♀ (SIZK).

One female in a poor condition fits well diagnosis of the subgenus, except the spiracular openings are not visible as the specimen is not dissected. It differs from both species included here by both antennae and legs light brownish-yellow, and wing pattern with three broad apical spots along R_{2+3}, R_{4+5} and M, plus brown spots at R_{2-5} fork, pterostigma, R–M and DM–Cu.

Melieria (*Paramelieria*) *felis* Kameneva, sp. n. (Fig. 10).

Type material. Holotype ♂: Turkmenistan: Kzyl-Djar, 18 km E of Kungrad, 16.06.1938, ♂ (Zimin) (ZISP); Paratypes: Kyrghyzstan: Tien-Shan, Kazarmak, 27.06.1961, ♂ (L. Peck); Uzbekistan: Kabakly on Amu-Daria, NW Buhara, 1.07.1910, ♂, 2 ♀ (Fischer); Syr-Daria prope Keles river, Tashkent distr., 12–13.05.[18]98, 5 ♂, 2 ♀ (Heyer) (ZISP, IZK); Turkmenistan?: "Postam-Khodako, old *Typha*", ♀ (Veltishchev) (ZISP); Tadjikistan: Djilikul on Vakhsh, 14.06.1934, 9, 12, 20.06, 10.07 1941, 27.06.1944, 4 ♂, 9 ♀ (Gussakovsky) (ZISP, IZK).

Description. Male. Head ratio = 1: 1.3: 1.5. Frons 0.9–1.2 times as long as wide, conspicuously narrowed posteriorly; ocellar triangle, vertical plates and fronto-orbital plates and frontal vitta yellow, sparsely grey tomentose except very small bare area in front of triangle and medial strip bare; frontal vitta with 8–16 rather long proclinate setae above the lunula, a row of 7–10 lateroclinate setae at fronto-orbital plates and 16–26 inclinate and reclinate setae at the middle. 2 pairs of strong orbital bristles. Parafacial yellow, white tomentose, with a row of rather long setae; genae yellow, white tomentose, 0.2 – 0.3 times as high as eye. Eye 1.6–1.7 times as high as long. Face white microtomentose, 1.2–1.3 times wider than high. Facial carina low, white tomentose, and antennal grooves not deep, subshining. Antennae: scape and pedicel yellow, with black setae; 1st flagellomere brownish-black, acute apically, whitish microtrichose; arista very long pubescent, brown. Clypeus yellow to brownish-yellow, grey tomentose, 0.07–0.1 as high as face. Mouthparts brownish–

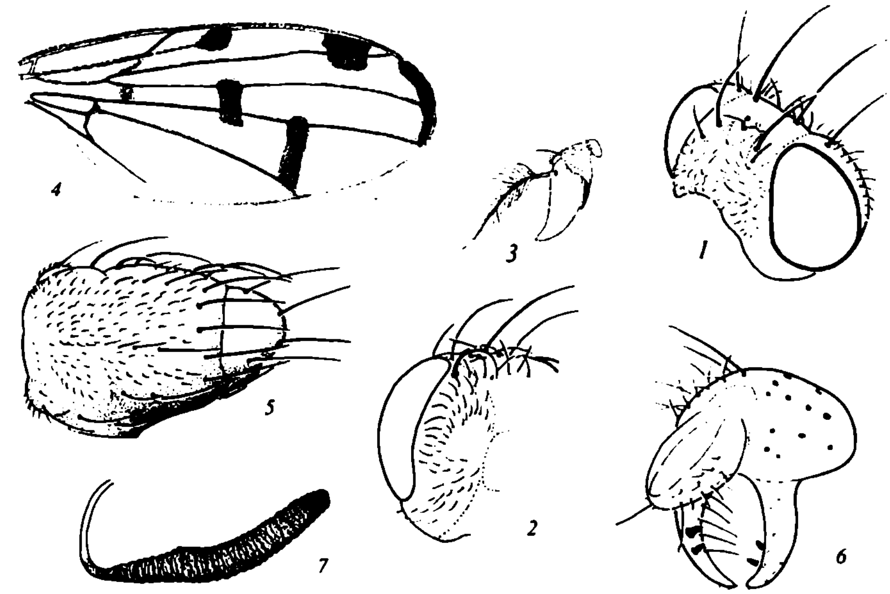


Fig. 9. *Melieria* (*Paramelieria*) *dolini*: *1* — head, left antero-dorsal view; *2* — same, left postero-dorsal view; *3* — flagellomere 1 left lateral view (enlarged); *4* — *wing*; *5* — scutum; *6* — epandrium, right postero-lateral view; *7* — spermatheca (one of the 3).

Рис. 9. *Melieria* (*Paramelieria*) *dolini*: *1* — голова, антеро–дорсально и слева; *2* — то же, постеро–дорсально и слева; *3* — 1-й флагелломер, слева (увеличено); *4* — крыло; *5* — щит среднеспинки; *6* — эпандрий, сзади и справа; *7* — сперматека (одна из трех).

yellow, prementum yellow to black, shining. Palpi narrow, yellow, with rather strong black setae. Occiput yellow, white tomentose, with 2 complete rows of postocular setae.

Thorax: brown to black, densely grey tomentose, without stripes. Scutum 1.2–1.4 times as long as wide. Postpronotum, scutellum and subscutellum yellow, grey microtomentose. 2 posterior dc ca. 2–3 as long as 1–2 pairs of postsutural dc in front of them; presutural dc a little longer than neighbouring setae, form distinct row; ac setae form 5–6 rather irregular rows; prescutellar ac bristles very long, subequal to posterior dc; sa of anterior pair strong. All the bristles and setae black.

Wing: hyaline, whitish microtrichose, 0.34–0.40 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 17–27 yellow uniformly thickened setae equal to those on antero-dorsal and antero-ventral edges of costa. Cells bc and c hyaline; sc brown in apical half. Light brown subbasal crossband is broken into spots below R_1.at the base of R_{4+5} and on BM–Cu crossvein, indistinct; discal one is broken into two spots: behind pterostigma in r_1 and around R–M crossvein. Two short subapical spots; the first extends from apical third of r_1 to the middle of the apical section of R_{2+3}; the second surrounds DM–Cu and is broadly separated from the first. Apical crossband brown. Length 5.0–6.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs: yellow, with black bristles and setae. Femora grey tomentose. Midfemur with 4–6 strong bristles on medial portion of anterior surface and 2–3 strong bristles on apical portion of posterior surface. Hindfemur with 2 long subapical bristles on antero-dorsal surface. Foretibia dark brown, with 4 moderately long dorso-apical bristles and ventro-apical comb of setae. Midtibia with 4–6 strong bristles on medial portion of anterior surface and ventro-apically with three long spurs, and 3–4 spur–like setae, 2–4 times longer than surrounding setae. Hindtibia with anterodorsal row of bristles, 2 times longer than surrounding setae, and ventro-apical row of thickened setae, including one longer spur. Tarsi brownish, with all setae on dorsal surface black and tarsomeres 1–4 with 2 ventral rows of thickened setae. Tarsomere 1 of hindtarsi with anteroventral row of black setae converting into arched row of longer and thick at base, but extremely acute setae on ventro-basal part and then going on the basal 1/4 of postero-ventral surface. Claws black.

Abdomen: brown with posterior margins of tergites yellow, densely grey tomentose, with setae and bristles black. Postabdomen as shown on Fig. 8, *4*. Surstyli rather narrow, with 2 prensisetae at subapical portion.

Female. Similar to male in general features. 5th tergum 2–2.5 times as long as tergum 6. Tergosternum 7 grey tomentose, 2.5–3 times longer than tergum 6 and 0.4–0.5 as long as cell cup. Terminalia as shown on Figs 10, *5*, *6*; 3 elongate wrinkled spermathecae with few papillae.

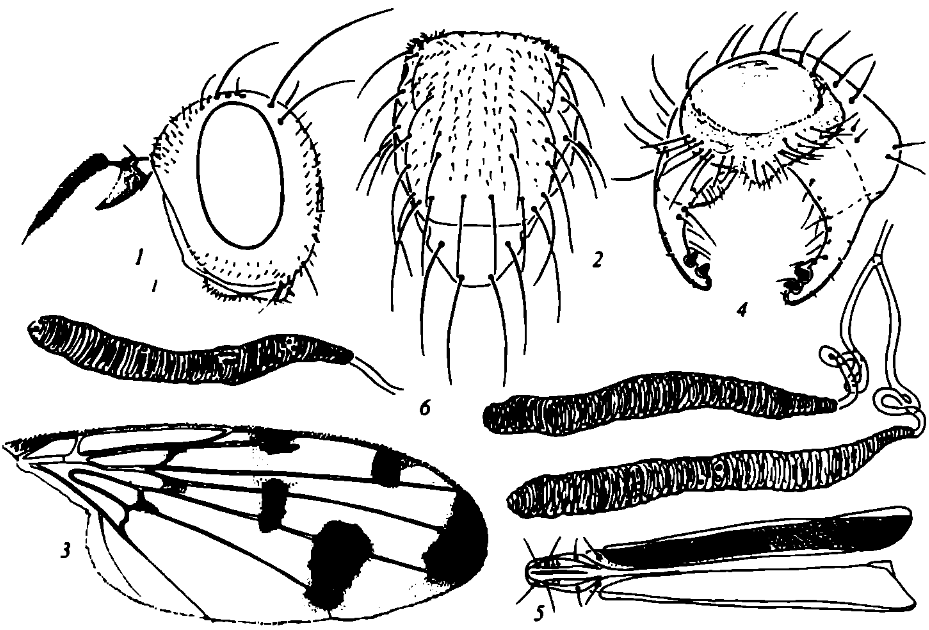


Fig. 10. *Melieria (Paramelieria) felis*: *1* — head, left view; *2* — scutum; *3* — *wing*; *4* — epandrium, posterior view; *5* — aculeus, ventral view; *6* — spermathecae.

Рис. 10 *Melieria (Paramelieria) felis*: *1* — голова, слева; *2* — щит среднеспинки; *3* — крыло; *4* — эпандрий, сзади; *5* — лезвие яйцеклада, вентрально; *6* — сперматеки.

Species of uncertain subgeneric placement

Melieria (subgenus?) *clara* K a m e n e v a, sp. n. (Fig. 11).

T y p e   m a t e r i a l . H o l o t y p e ♂: Turkmenistan: Kzyl-Djar, 18 km E of Kungrad, 16.06.1938 ♂ (Zimin) (ZISP); P a r a t y p e s : Kazakhstan: "Syr-Daria prope Chardara, Tashkent distr. " [Shymkent reg.], 14.05.[18]98, ♂, ♀ (Heyer) (ZISP, IZK); Uzbekistan: Syr-Daria opposite Keles river, Tashkent distr., 12–13.05.[18]98, 6 ♂, 3 ♀ (Heyer) (ZISP, IZK); Turkmenistan: Kzyl-Djar, 18 km E of Kungrad, 16, 20.06.1938, 2 ♂, 7 ♀ (Zimin); Turkmenistan?: "Kazakh-Bugut", ♂ (Veltishchev) (ZISP); Tadjikistan: Djilikul on Vakhsh, 14.06.1934, ♀ (Gussakovsky) (ZISP).

D e s c r i p t i o n . M a l e . H e a d ratio = 1: 1.3: 1.6. Frons 1.0–1.2 times as long as wide, conspicuously narrowed posteriorly, yellow, densely white tomentose; frontal vitta with a row of 10–14 proclinate setae above the lunula, 8–12 lateroclinate setae at fronto-orbital plates and 14–20 inclinate and reclinate setae at the middle. 2 pairs of orbital bristles, an anterior pair 2–3 times longer than surrounding setae and 1/2 as long as the posterior bristle. Parafacial yellow, white tomentose, with a row of setae; genae yellow, grey tomentose, 0.3 – 0.4 times as high as eye. Eye 1.5–1.8 times as high as long. Face white tomentose, 1.2–1.3 times higher than wide. Facial carina conspicuously produced, and antennal grooves rather deep. Antennae dark yellow, scape and pedicel with black setae; pedicellar seam is deep; 1st flagellomere black, acute at apex, whitish microtrichose; arista rather short pubescent, yellowish brown at base, brown in the rest. Clypeus brown, grey tomentose, 0.1 as high as face. Mouthparts brown, prementum dark brown, shining. Palpi narrow, whitish, with black setae. Occiput with 2 complete rows of postocular setae.

T h o r a x : black, densely grey tomentose. Scutum 1.2–1.3 times as long as wide. Postpronotal lobes, scutellum and subscutellum yellow, grey microtomentose. 2 posterior dc 2–2.5 longer than anterior, seta-like dc; ac setae arranged into 6 more or less distinct rows; prescutellar ac bristles 1/2–1/3 as long as dc; anterior sa 1/2 as long as posterior one. All the bristles and setae black.

W i n g : hyaline, whitish microtrichose, 0.34–0.4 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 19–25 thin setae, neither thickened, nor different from those on R_1. Wing pattern strongly reduced to indistinct shadows surrounding R–M and DM–Cu. Apical crossband very broad, joined to the anterior subapical spot in r_1 cell. Length 3.0–5.0 mm. Calypters light yellow, with whitish cilia. Halters yellow.

L e g s : yellow, with black bristles and setae. Fore- and midfemur brownish, densely greyish tomentose, hindfemur dark yellow. Foretibia brownish yellow, with 4 apical thickened setae. Midtibia ventro-apically with one rather long spur (ca. as long as tibia width) and two slightly shorter spurs, and 3–5 thickened setae, nearly as long as surrounding setae. Hindtibia without anterodorsal row of longer bristles, and setae of ventro-apical row fine. Tarsi brownish yellow, with yellowish setae and black ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres 1–3 of midtarsi with ventral areas, and tarsomere 4 with 2 ventral rows of thickened setae. Hindtarsi whitish setulose ventrally and black setulose dorsally, except the base of tarsomere 1 with a transverse row of 5–7 rather long and thick (0.5–1.0 times as long as width of tarsomere), black setae. Claws black.

A b d o m e n : brown to black, densely grey tomentose in basal half and brown in apical, with setae and bristles black. Postabdomen as shown on Fig. 11, *4*. Surstyli with 2 prensisetae in subapical portion of their length.

F e m a l e . Similar to male in general features. 1st flagellomere rounded at apex. 5th tergum 2–3 as long as tergum 6.Spiracular openings in normal position, latero-ventrally of tergites. Tergosternum 7 grey tomentose, 2–3 times longer than tergum 6 and 0.25–0.35 as long as cell c_2. Terminalia as shown on Figs 11, *5*, *6*. Spermathecae elongate, rather small, wrinkled with few papillae.

D i s c u s s i o n. *M. clara* resembles species currently assigned to *Melieria* (*Phaeosoma*) by densely tomentose frontal vitta and black flagellomere 1. Contrary to *M.* (*Ph.*) *nigricorne* (B e c k e r) and *M.* (*Ph.*) *atricorne* M i k that have extremely long surstyli and no prensisetae (autapomorphies of *Phaeosoma* ?), the new species possesses two subapical prensisetae on moderately short surstyli, and rather long pubescence of arista, like many other *Melieria*. Since taxonomy of *Phaeosoma* is outside of the scope of this paper, possible relationships of *M. clara* with other species assigned to *Phaeosoma* are uncertain still.

Melieria (subgenus?) *parmensis* R o n d a n i (Fig. 12).

Melieria parmensis Rondani, 1869: 19; *Hypochra parmensis* (Rondani, 1869): Mik, 1885: 279; Becker, 1905: 100; Hennig, 1939: 43; Soós, 1983: 255; 1984: 50.

T y p e m a t e r i a l . L e c t o t y p e : ♂: Italy: "1597", "Parma" (MZF) (not examined) (designated by Soós, 1983); P a r a l e c t o t y p e s : ♂, 2 ♀: Italy: "1597", "Parma", "Etr. Parma"["in collibus agri parmensis", "in Pedemontio", "in Etruria"] (MZF) (not examined). N o n - t y p e m a t e r i a l . 165 ♂, 179 ♀, 17 specimens with abdomen lost: <State?>: "coll. Mik"; "Mik" (locality and date not given); 30.05.1885 (abdomen lost) (Mik); 18.06.1885 (Mik); 30, 31.05.1887 (Handlirsch) (NHMV); Austria: "Salisburg/ Aigen" (Mik) (NHMV); Italy: [Lombardia, Bergamo's Alps] Sondrio, 1.05.1898 [Bezzi]; ibid., 24.06.1898 (Bezzi); "Bozen" [= Bolzano] 06.1896 (collector not given) (coll. Oldenberg) (DEI); "Mann/ Bozen" and "Alte Sammlung" (NHMV); Azerbaiçan: "A<I>çigan-çay <riv.>, steppe Turut" [20 km E of Mingeçaur], 19.05.1948 (Bogachev) (ZISP).

R e d e s c r i p t i o n . M a l e . H e a d ratio = 1: 1.3: 1.5. Frons 1.1–1.3 times longer than wide, conspicuously narrowed posteriorly; occiput, ocellar triangle and vertical plates brown to black, densely grey tomentose, fronto-orbital plates yellow, grey tomentose; frontal vitta opaque, light to dark yellow, with a row of 10–15 proclinate setae above the lunula, a row of 6–8 lateroclinate setae at fronto-orbital plates and 6–10 reclinate setae at the middle. 1 pair of strong orbital bristles, an anterior pair 1.5–2.0 times longer than surrounding setae and 1/4–1/5 as long as the posterior or. Parafacial yellow, white tomentose, with a row of rather long setae; genae yellow, grey tomentose, 0.2 – 0.3 times as high as eye. Eye 1.5–1.7 times as high as long. Face greyish microtomentose, subhyaline, a little higher than wide. Facial carina conspicuously produced, and antennal grooves rather deep. Antennae yellow to dark yellow, scape and pedicel with black setae; 1st flagellomere slightly acute at apex, whitish microtrichose; arista pubescent, yellowish brown in basal half, brown in the rest. Clypeus brown, grey tomentose, 0.12–0.13 as high as face. Mouthparts brownish-yellow, prementum yellow, shining. Palpi narrow, yellow, with black setae.

T h o r a x : black, densely grey tomentose. Scutum 1.1–1.3 times as long as wide. Scutellum and subscutellum black, grey microtomentose. 2 posterior dc 2–2.5 as long as postsutural seta-like dc and 3–3.5 times longer than the presutural seta; ac setae arranged into 4–6 more or less distinct rows; prescutellar ac bristles nearly half as long as dc; an additional pair of very short seta-like bristle in front of sa. All bristles and setae black.

W i n g : hyaline, whitish microtrichose, 0.38–0.43 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 15–17 thin setae, neither thickened, nor distinguishing from those on R_1 and anterior margin of C. Cells bc and c hyaline; sc brown in apical half. Brown subbasal crossband extends from R_1 to middle of cua_1 cell; discal one extends from pterostigma through R–

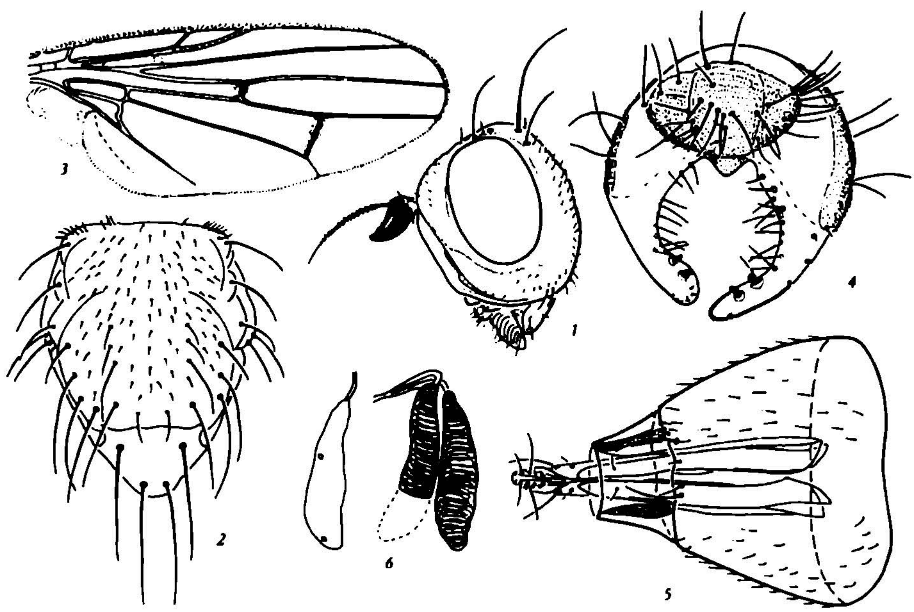


Fig. 11. *Melieria* (subgenus ?) *clara*: *1* — head, left view; *2* — scutum; *3* — wing; *4* — epandrium, posterior view; *5* — aculeus, ventral view; *6* — spermathecae.

Рис. 11. *Melieria* (subgenus ?) *clara*: *1* — голова, слева; *2* — щит среднеспинки; *3* — крыло; *4* — эпандрий, сзади; *5* — лезвие яйцеклада, вентрально; *6* — сперматеки.

M crossvein to middle of cua_1. Two short subapical spots; the first extends from apical third of r_1 to the middle of r_{4+5} cell; the second surrounds DM–Cu and is broadly separated from the first. Apical crossband very broad, joined to the anterior subapical spot in r_1 cell. Length 2.9–5.0 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs: dark yellow to dark brown, with black bristles and setae. Fore- and midfemur brown to black, greyish tomentose, hindfemur dark yellow to brown. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spurs, and 3–5 thickened setae, nearly equal in length to surrounding setae. Hindtibia without anterodorsal row of longer bristles, and the setae of ventro-apical row are rather fine. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely white setulose on ventral surface. Tarsomeres 1–3 of midtarsi with ventral areas, and tarsomere 4 with 2 ventral rows of thickened setae. Hindtarsi whitish setulose ventrally and black setulose dorsally, except the base of tarsomere 1 with a transverse row of 5–7 rather long and thick (0.5–1.2 times longer than width of tarsomere), black setae. Claws black.

Abdomen: brown to black, densely grey tomentose in basal half and brown apically, with setae and bristles black. Epandrium as shown on Fig. 12, *6*. Surstyli with 2 prensisetae in middle portion of their length, and rather strong cuneiform bristle above, in line with them.

Female. Similar to male in general features. 1st flagellomere rounded at apex. 5th tergum 3 times as long as tergum 6. Tergosternum 7 grey tomentose, 3–3.5 times longer than tergum 6 and 0.6–0.7 as long as cell c_2. Terminalia as shown on Figs 12, *7*, *8*. Spermathecae elongate, rather small, wrinkled with distinct, but not numerous, papillae.

Discussion. *M. parmensis* differs from all the smaller species of *Melieria* by well-developed wing pattern, and somewhat reduced chaetotaxy. Like the following new species, it shares no valuable characters with any other species of the genus, and therefore cannot be placed to any of the three subgenera of *Melieria*. Chaetotaxy of *M. parmensis* includes moderately long and sparse setae on the scutum, and some of them, like the presutural **dc** cannot be certainly interpreted as long setae or short bristles; in the latter case, cladistic analysis shows possible relationships with the *Melieria* (s. str.) lineage.

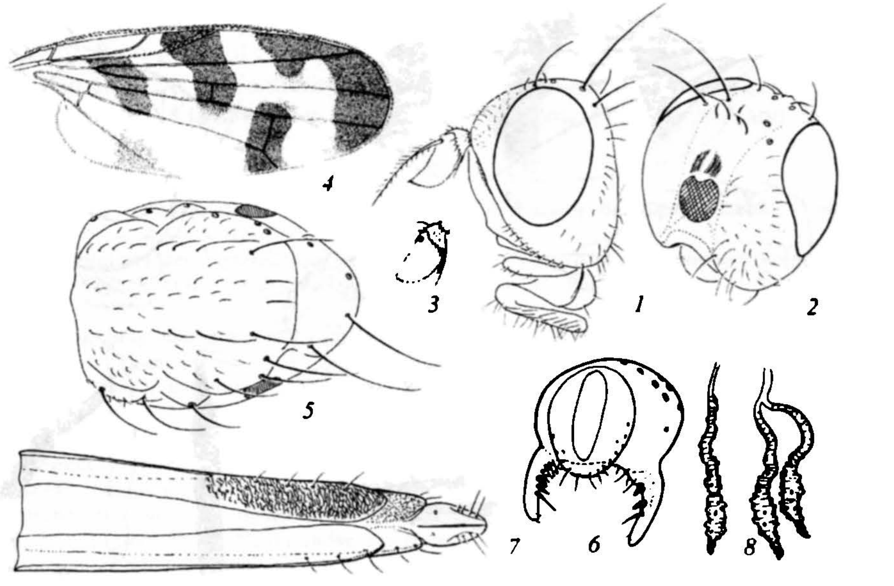


Fig. 12. *Melieria* (subgenus ?) *parmensis*: *1* — head, left lateral view; *2* — same, right postero-dorsal view; *3* — antenna of female; *4* — *wing*; *5* — scutum; *6* — epandrium, right posterior view; *7* — aculeus and eversible membrane, ventral view; *8* — spermathecae.

Рис. 12. *Melieria* (subgenus ?) *parmensis*: *1* — голова, слева; *2* — то же, постеро-дорсально и справа; *3* — усик самки; *4* — крыло; *5* — щит среднеспинки; *6* — эпандрий, сзади и справа; *7* — лезвие яйцеклада и выворачиваемая мембрана; *8* — сперматеки.

Melieria (subgenus?) *pseudosystata* Kameneva, sp. n. (Fig. 13).

Type material. Holotype ♀: Turkmenistan: Tashauz, 28.05 1931 (Ushinsky) (ZISP); Paratypes: Uzbekistan: Kumak, 13.05.1929, ♂, ♀ (Zimin) (ZISP); Turkmenistan: Tashauz, 26.05– 10.06.. 1931, 3 ♂, 1 ♀ (Ushinsky); Farab, N. -W. Buhara, 4.05.1915, 2 ♂ (Hohlbeck); Kerki, 22.05.1934, ♂ (Luppova); Tadjikistan: Djilikul on Vakhsh, 15.06 1941 (Gussakovsky) (ZISP).

Description. Male. Head ratio = 1: 1.35: 1.45. Frons 1.2–1.4 times as long as wide, conspicuously narrowed posteriorly; occiput, ocellar triangle and vertical plates dark yellow, sparsely white tomentose, fronto-orbital plates yellow, grey tomentose; frontal vitta opaque, light to dark yellow, with 8–12 proclinate setae above the lunula, a row of 8–10 lateroclinate setae at fronto-orbital plates and 8–10 reclinate setae at the middle. 2 pairs of orbital bristles, an anterior pair 2–2.5 times longer than surrounding setae and 1/2–1/3 as long as the posterior or. Parafacial yellow, sparsely tomentose, with a row of 5–6 rather long and fine brownish setae; genae yellow, grey tomentose, 0.2 – 0.25 times as high as eye. Eye 1.5–1.8 times higher than long. Face greyish microtomentose, a little higher than wide. Facial carina conspicuously produced, and antennal grooves rather deep. Antennae yellow to dark yellow, scape and pedicel light yellow, with rather sparse and thin brown setae; 1st flagellomere yellowish brown in basal half gradually tapered apically, slightly acute at apex, whitish microtrichose; arista moderately long pubescent, yellow in basal 1/4, brown in the rest. Clypeus yellow, grey tomentose, 0.1 as high as face. Mouthparts brownish–yellow, prementum brown, shining. Palpi narrow, yellow, with black setae.

Thorax: reddish-brown, sparsely grey tomentose. Scutum 1.1–1.3 times as long as wide. Postpronotal lobe, notopleura brownish–yellow, scutellum and subscutellum yellowish brown, sparsely tomentose. 2 posterior dc 2–3 times longer than anterior, seta–like dc and 3.5–4.5 longer than the setae in front of; ac setae arranged into 2–4 more or less distinct rows; prescutellar ac bristles nearly as long as dc; only one pair of sa. All the bristles and setae black.

Wing: hyaline, with three light brown crossbands, 0.35–0.37 times as wide as long. Dorsal surface of costal vein distally of R_1 apex with 1–11 thin setae, neither thickened, nor distinguishing from those on R_1 and anterior margin of C. Cells bc and c both dark yellow, c and sc brown in apical halves. Brown subbasal crossband extends from C to middle of cua_1 cell; discal one extends from pterostigma through R–M crossvein and DM–Cu to posterior margin, and is broadly separated from

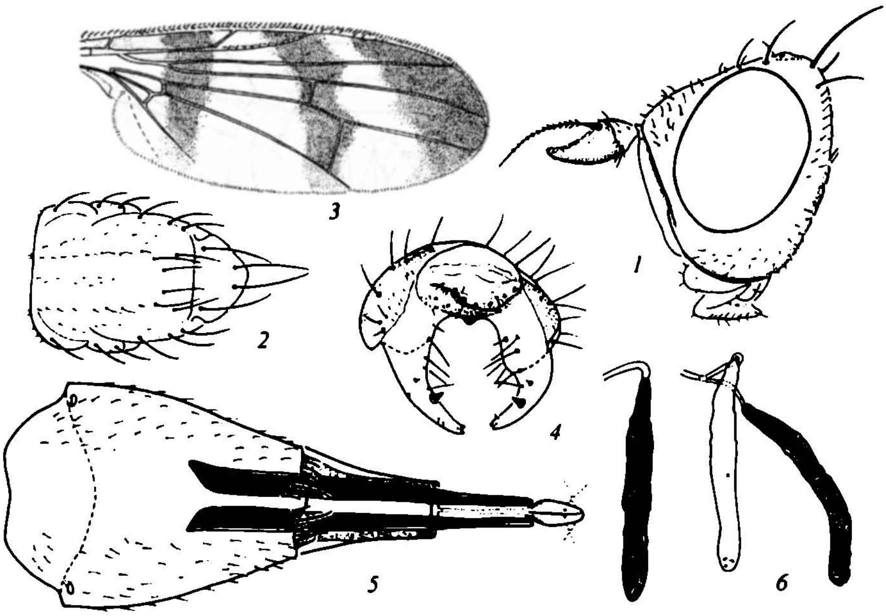


Fig. 13. *Melieria* (subgenus ?) *pseudosystata*: *1* — head, left view; *2* — scutum; *3* — wing; *4* — epandrium, posterior view; *5* — ovipositor, ventral view; *6* — spermathecae.

Рис. 13. *Melieria* (subgenus ?) *pseudosystata*: *1* — голова, слева; *2* — щит среднеспинки; *3* — крыло; *4* — эпандрий, сзади; *5* — яйцеклад, вентрально; *6* — сперматеки.

the first. Apical crossband very broad, covering whole apex from the middle of r_1 to the apex of m cell. Transverse veins approximated, the penultimate section of M is shorter, than DM–Cu. Length 2.7–3.5 mm. Calypters light yellow, with whitish cilia. Halters yellow.

Legs dark yellow, with black bristles and setae. Midtibia ventro-apically with one rather long (ca. as long as tibia width) and one shorter spurs, and 3–4 thickened setae, nearly equal in length to surrounding setae. Hindtibia with anterodorsal row of longer bristles, and the setae of ventro-apical row are rather fine. Tarsi yellow, with yellowish setae and brownish ventro-marginal setae on tarsomeres 3–5; foretarsi with tarsomere 1 densely black setulose on ventral surface. Tarsomeres 1–3 with 2 ventral rows of slightly thickened setae. Hindtarsi dark yellow setulose ventrally and black setulose dorsally, except the base of tarsomere 1 with a transverse row of 5–7 rather long (0.5–0.8 times longer than width of tarsomere), black setae. Claws black.

Abdomen: brown to black, sparsely tomentose, subshining, with setae and bristles black. Postabdomen as shown on Fig. 13, *4*. Surstylus with 1 prensiseta in subapical third of their length, and smaller, inconspicuous prensiseta dorsally of it.

Female. Similar to male in general features. 1st flagellomere rounded at apex. 5th tergum 1.5–2 times longer than tergum 6. Tergosternum 7 grey tomentose, 3 times longer than tergum 6 and 0.7 as long as cell c_2. Terminalia as shown on Figs 13, *5*, *6*. Spermathecae elongate, rather small, wrinkled with few papillae.

Discussion. *M. pseudosystata* strongly resembles species assigned to the genus *Systata* Loew (Otitini: *Otites* group of genera) in chaetotaxy and wing venation, differing in the flagellomere 1 acute, arista pubescent, and male genitalia different from those in species of *Otites* and related genera. It must be noted, that no specimens of *Systata obliqua* Loew, a small-sized brownish fly from Greece, superficially similar to *M. pseudosystata* were available for comparison with the latter.

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ЗАМЕТКИ

Новый для фауны Кавказа вид усача (Coleoptera, Cerambycidae) — *Asias halodendri* (Pallas, 1776). — 2♂, Кавказ, Дагестан, окр. пос. Рутул, высота — 1800 м, на трагакантовых астрагалах, 16.06.1994 (Байдак); ♂, там же, 15.07.1994 (Артамонов). Ранее был известен из Сибири, Сев. Китая, Сев. Монголии, Кореи. — **С. И. Байдак** (Институт зоологии НАН Украины, Киев).